THE BUILDER

INCORPORATING

"ARCHITECTURE" AND "THE BRITISH ARCHITECT"

VOL. CLXI DECEMBER 19 1941 NO. 5159

FEEDING THE WORKERS

IT is but a short while ago that we were seriously weighing the merits of rationalisation in industry, and entertaining doubts as to whether this regimenting process was really worth the results, for it seemed to do little more than swell the profits of the industrialists and the ranks of the unemployed. The movement was unpopular with the worker, not only on this account but because of the irritating restrictions upon free movement and conduct which seemed inherent in it. Those who were most active in promoting it seemed to have a narrow point of view, in which efficiency filled the picture to the exclusion of all other considerations.

Yet few of us would have the courage or, let us say, the foolhardiness to claim that efficiency, in its widest sense, is not an ideal; for surely efficient living is a prime aim. We cannot be really happy in a muddle, and it is muddle which efficiency aims to eliminate.

The fault was not in setting up this aim as an essential in human progress, but in contenting ourselves to lag behind in that quality in all but industrial matters. It is too much to expect that men will willingly work to a pattern if they believe that their efforts will tend to deny others a means of livelihood. They can hardly believe that every moment counts when time and effort are squandered elsewhere all around them.

Whatever the war has done, or will do, it has at least shown that men and women will work willingly to a pattern if they can see the need for it, and can be convinced that what they are doing is of supreme importance. The issues at stake are clear enough to induce every citizen with a spark of patriotism within him to give to the utmost of his energies.

In such a new atmosphere the quest for efficiency moves forward with a new impetus. It is no longer a matter of money-grubbing, but one of life and death. The man who resented being drilled into a robot is now proud to be a cog in the vast machinery of national effort, and we can look upon him as such without offence to his self-respect. We should do so consistently and recognise that the human cog-wheel will burn out its bearings as easily as will his steel counterpart if we do not remember that regular attention and high-grade lubricants are essential to smooth and efficient running. We must treat this as a routine job, never to be forgotten and never stinted. Our human machines must be fed with the things that breed energy and stamina, and in a way which eliminates friction and mental irritation.

That is why the subject of canteens is so important, and why, in these preoccupied times, when so much paper is being wasted on words that contribute little or nothing to the war effort, "Canteens at Work"* a booklet written by Mr. C. G. Gardiner, managing director of the National Catering Service in London, so fully justifies itself. No industrial firm, no works manager, no architect employed upon such matters, can afford to make any detailed plans without first studying this comprehensive text-book—for that dignified description it undoubtedly deserves. It should be widely known and read.

Comprehensive treatment and concise writing are neither rare qualities, except when found together, as in this work, and if this had been the result of many years of research and study it would still have deserved the highest credit. As a war-time publication, dealing with a subject which had not previously acquired the national importance it now has, the book is one of outstanding importance.

It opens with a brief and convincing argument upon the significance and importance of canteen establishments, and then proceeds to deal with layout and design, detailed planning, technical equipment, food and staff management, and finance and discipline. It would be difficult to summarise the contents in fewer words than the author has used, and we will do no more than touch upon some of the more outstanding points. Of these, the large isometric drawing of a complete canteen kitchen unit, which we reproduce elsewhere in this issue, and which is folded into the end of the book, is not only a pictorial summary of an important part of its contents which any layman could understand, but a useful technical drawing upon which the technician can lay his scale. The other illustrations, mainly photographs, show the fittings which the modern kitchen must contain.

There are also a number of clear tables in convenient reference form which are well worth study, and even memorising in many cases. From one of these it is instructive to see that whereas the large canteen to seat 1,000 needs one in staff per 33, the smaller establishment of one-tenth its size is not so very much more extravagant of staff, needing only one per 20. It is clear, therefore, that the principles upon which the planning of these units has been worked out are not such as to apply only to the large units, but are equally suitable to the smaller—an important point in its relation to the policy of dispersal.

It would be depressing if we were induced to feel that the thought and intelligence applied to this subject would be wasted when the war ends, and the value of the work will be the more appreciated if we can take a longer view. For ourselves, we are convinced that unless we can find a way of keeping the wheels of industry turning at full capacity, upon work sufficiently important to catch the imagination of the operatives, as our war aims have already done, we shall fail to build up the new earth which alone can justify the waste and sorrow of this present ordeal.

Efficiency is not a monopoly of war, but has its proper place in any highly organised scheme of society. Thus "Canteens at Work" will not only help the architect out of many immediate problems, but will be kept for reference in the days after the war.

*London: Humphrey Milford, Oxford University Press. Price 4s. 6d.

NOTES AND NEWS

Control of Civil Building.

THE Ministry of Works announces that as from January 1, 1942, a revised Defence Regulation 56A will come into force. Under the new Regulation, no work of Repair (including War Damage), Maintenance of Premises, Decoration, Redecoration, Construction, Reconstruction, Alteration or Demolition is permitted in the United Kingdom if the total cost of the work exceeds £100 (including labour), unless a licence to carry out such work has first been obtained from a Regional Licensing Officer of the Ministry. In addition, no work of the kind mentioned above may be undertaken on *any single property* in the United Kingdom if the cost of such work together with the cost of any other such work carried out on that single property during the 12 months immediately preceding exceeds the sum of £100 unless a licence has first been obtained in respect of such work.

Local or Highway Authorities and Public Utility Undertakings require to obtain an authorisation from the appropriate Government Department for work of construction, reconstruction or alteration only, the cost of which exceeds £100. Copies of the new Defence Regulation 56A may be obtained from H.M. Stationery Office, or through any bookseller, and copies of a new (third) edition of the "Notes for the Guidance of Applicants" may be obtained from the Regional Licensing Officer, Ministry of Works and Buildings.

The Ministry add: In their own interests, employers not registered as Building or Civil Engineering Contractors who have in their direct employment staff engaged on the maintenance of their own premises, and who have not made the return on Form B.C.E.4 (available at Employment Exchanges) should do so immediately.

Barry's Plans for Houses of Parliament.

ARISING out of the discovery by Mr. Charles Marshall, F.R.I.B.A., of a collection of Barry's plans for the Houses of Parliament, Mr. Marshall has written to *The Scotsman*: "Mrs. A. C. Burt has asked me to reply to Mr. Anson's letter in your issue of December 2 asking if the drawings of the Houses of Parliament that I have handed over to the Office of Works throw any light on the controversy as to whether Sir Charles Barry or Pugin was the designer of that building.

"The drawings I had were by many different hands, but some of them were certainly by Pugin himself and are signed by him. There must have been a very numerous staff in Sir Charles Barry's office, as the numbered drawings ran into thousands, and as Pugin was chief draughtsman, all the drawings would pass through his hands before being passed by Sir C. Barry. There are some elaborate drawings (signed by Pugin) of some of the principal frontages, which had been drastically altered after they had been inked in, as if they had been altered after Pugin had finished with them. When the Office of Works has finished with the drawings they will go into the library of the Royal Institute of British Architects, where they may be studied by the public. The real question is—Who designed the sketches for the competition drawings?

"Among the other drawings by Sir Charles Barry that came into my possession were some of the original drawings for the Travellers and Carlton Clubs. I offered these to the two clubs concerned; the Travellers accepted the offer, and the Carlton refused it. The drawings, therefore, of the Travellers can be seen at that club, and of the Carlton at the R.I.B.A. library. They are, of course, in the Classic style, not Gothic, like the Houses of Parliament."

Photography and Recording of Buildings.

A REPRINT has reached us of the second report of the Technical Committee of the Royal Photographic Society on the application of photography to the work of the National Buildings Record. In this, recommendations are made for the guidance of collaborators in arranging for the photographing of buildings in such a way that dimensional architectural plans and elevations could be derived from the photographs if required. The value of this publication is greatly added to by an article on "The Photogrammetric Analysis of Photographs of Buildings," by Mr. P. J. Waldram, F.S.I. the practical nature of which should greatly assist those helping in the essential work of recording national buildings of interest. Copies of the publication may be obtained from the Secretary, the Royal Photographic Society, 16, Prince's-gate, S.W.7.

PRINCIPAL CONTENTS

ARTICLES

	Page
LEADER : Feeding the Worker ...	545
BRITISH STONE. By Arnold Whittick	547
AN ARCHITECT'S VIEW OF RECONSTRUCTION—4. By H. V. Lanchester, F.R.I.B.A.	549
CORRESPONDENCE	556
THE POST-WAR HOME. R.S.A. Lecture by Miss E. Denby... ...	557
WEATHERPROOF WALLS. Conclusion of Mr. Fitzmaurice's Paper ...	558
FORTHCOMING CONSTRUCTION	561, 564-6
WAGES, MATERIALS PRICES ...	562-4

ILLUSTRATIONS

ADDITIONS TO "FRESDEN," WILTS. By Farquharson and McMorran, F. & A.R.I.B.A.... ...	550
FLATS, ST. JOHN'S WOOD. By W. J. Kieffer	554
AGRICULTURAL HOSTEL IN S. ENGLAND. By Geoffrey Mullins, F.R.I.B.A.	555

COMING EVENTS

Saturday, December 20.

ECCLESIOLOGICAL SOCIETY. — Mr. F. Darwin Fox on "Mediæval Conception of Music in Worship." At 6, Queen-square, W.C.1. 2.30 p.m.

Tuesday, December 30.

HOUSING CENTRE LUNCH.—Mr. Gordon Payne on "Planning for Post-War Gloucestershire." 13, Suffolk-street, S.W. 1 p.m.

Tuesday, January 13.

LONDON MASTER BUILDERS' ASSOCIATION.—Annual Luncheon. Connaught Rooms, Great Queen Street, W.C.

Wednesday, January 14.

ROYAL SOCIETY OF ARTS.—Dr. E. F. Armstrong on "The Post-War Home: Materials Old and New." Adelphi, W.C. 1.45 p.m.

Thursday, January 15.

INSTITUTION OF ELECTRICAL ENGINEERS.—Mr. W. Gilchrist on "Problems in application of Electrical Heating to Residential and Commercial Premises." Savoy-place, W.C.2. 4 p.m.

Tuesday, January 20.

LONDON MASTER BUILDERS' ASSOCIATION.—Annual General Meeting.

The Fitzwilliam Museum, Cambridge.

PROFESSOR A. E. RICHARDSON, Hon. M.A. (Cantab.), A.R.A., F.R.I.B.A., has been appointed a Syndic of the Fitzwilliam Museum, Cambridge.

An Appointment.

MR. EWART G. CULPIN, F.R.I.B.A., P.-P.T.P.I., J.P., has been recommended by the London County Council to the Army Council and the Air Council for appointment as the Council's representative on the Territorial Army and Air Force Association of the County of London during the term of office ending October, 1944.

British Standards Institution.

AT a recent meeting of the Chemical Divisional Council of the B.S.I., Dr. E. F. Armstrong, F.R.S., who has been Chairman of the Divisional Council since its formation some 10 years ago, retired from the Chairmanship—being fully occupied at the present time as Chemical Adviser to the Ministry of Home Security—and MR. ROGER DUNCALFE, President of the A.B.C.M., was appointed to succeed him.

The late Jeffrey Waddell.

THE death has occurred at his Lanarkshire home of Mr. J. Jeffrey Waddell, architect and archæologist. In collaboration with the late Dr. P. McGregor Chalmers, Mr. Waddell restored many buildings, including Iona Cathedral, Paisley Abbey, and the Town Church, St. Andrews. He specialised in church work, particularly in restoration, and worked on the old parish church of Bothwell, Dornoch Cathedral, and the Foulis Wester parish church. As an archæologist he discovered many ancient carved stones, a particularly fine specimen being the Cross of St. Ninian, now standing before the parish church in Hamilton.

Factory Accident Prevention Organisers.

THE first training course for industrial accident prevention organisers ever held in this country, arranged by the Royal Society for the Prevention of Accidents on behalf of the Factory Department of the Ministry of Labour and National Service, was, we hear, such an outstanding success that a second course is being held at Balliol College, Oxford, from January 2-13 next. The syllabus covers every aspect of industrial accident prevention, and over 20 lecturers will take part. Particular efforts are directed to giving trainees a solid grounding in the now extensive technology of the subject as well as in organisation and the law. The course is residential: lodging and lectures thus being under one roof, the maximum amount of time can be given to intensive instruction. About 50 trainees, nominated by their employers, will be accommodated. Programme and syllabus may be obtained on request from 52, Grosvenor-gardens, London, S.W.1, or 426, Strand, Cheltenham, Glos.

IN 1916.

FROM *The Builder*, DECEMBER 15.

The Government have decided to establish a separate Department of Scientific and Industrial Research for Great Britain and Ireland. . . . They have also decided, subject to the consent of Parliament, to place a large sum of money at the disposal of the new Department, to be used as a fund for the conduct of research for the benefit of the national industries. . . . Mr. H. Frank Heath, C.B., has been appointed Permanent Secretary.

BRITISH STONE

ITS USE IN POST-WAR BUILDING

By ARNOLD WHITTICK.

In the proposals discussed for rebuilding and replanning after the war there is now general acceptance of the principle that the country should be planned as a whole, and that the national plan should be operated by a central planning authority. This, it is hoped, will conduce to a proper zoning of the various parts of national and social life, and will secure a co-ordination of the various elements and sections of the country so that it will function as an organic whole, taking the place of the piecemeal planning and patchwork of schemes that has obtained in the past. That, at any rate, is the vague ambition shared by many to-day.

Such a national plan, it is contended, will not take away the existing planning powers of local authorities, for it is recognised that it is the essence of democracy that various localities shall have a voice in the planning of their own districts. It would involve, however, an attempt to relate the planning of different districts so that they shall function as efficient parts of a whole. This does not mean that districts will lose their local character in a general design; on the contrary, it is realised both by the Government and its expert advisers that the preservation of local character need not stand in the way of a district functioning as a part of an efficient whole. Further, it is felt that local character often means something which is æsthetically unique, and the preservation of things of æsthetic value should be important in future planning. The sense of tradition, the linking of the past with the present are very important for intelligent national life.

Local character in building is dependent to a great extent on local materials, and among the chief of these is stone. Much of the unique charm of many of the villages and small towns of England depends on the character given to them by the use of the local stone employed in the churches, houses and cottages. One can think, for example, of the villages of Somerset with the square-towered church and cottages, all built of the lovely warm, yellowy-brown Ham Hill stone. Bath, perhaps the loveliest city in England, owes much of its charm and appeal to the consistent use in the eighteenth-century of the local Bath stones. And other cities and towns like York and Stamford have an atmosphere all their own, created largely by the prevalence of the local stone in the buildings. And even the City of London acquires something of its character from the Portland stone, at first buff, but weathering to black and white, which has been used for most of its buildings.

A Tradition to Preserve.

Surely, then, here is a valuable tradition to preserve, but we are in danger of ignoring it. Recently I was in one of the loveliest of the old market towns in Wiltshire. It has been built mainly of the local oolitic limestone. In one part near a church and inn, both of this stone, a new cinema has been erected, and it appears a building of bright red brick in violent discord with the buildings of the vicinity, and doing much to spoil the local charm and character of that corner of the town. It is not a question of modern as distinct from old building, for the structural material of the modern cinema is mainly steel, and concrete and brick are used as a filling-in and facing material. Why, it may be asked, could not the local stone have been used as the facing material? Here is clearly a case of necessary æsthetic control by the local authority.

The use of local stone, which has contributed so much to the beauty of many of the small towns and villages of England, was due in the first place, of course, to the use of the most readily available material. The architecture of different countries has depended much in the past on their geological character, and, with the extensive building of the Gothic churches and cathedrals in England from the eleventh century, quarries were gradually developed in most of the northern, western and south-western areas. Modern transport facilities and the increasing use of synthetic materials produced at an economic rate make the circumstance of local convenience commercially unimportant. But the æsthetic reason remains, and it is a reason which is fortified by geological and scenic considerations.

Geological character largely determines the scenery of a country. Igneous rocks are responsible for mountainous, rugged and rocky country like that of the Scottish Highlands, Cumberland, North Wales, and parts of Cornwall and Devon. Most of England is flat or undulating country and is composed of sandstones and limestones, the vegetation varying to some extent with the rocks. Some experienced observers contend that they can tell the difference between a limestone and sandstone country. Ruskin remarked that "a limestone landscape is apt to be dull and cold in general tone, with some aspect even of barrenness." "The sandstones," he added, "are much richer in vegetation." This is true, however, only if the limestone is fairly near the surface as at Portland, or Leckhampton or some parts of Derbyshire, but hardly true when it lies deeper, as with the Bath stones. But that is a detail which hardly affects the fact that rocks form the contours and even partially determine the vegetation of a landscape.

To build of rocks of the district is really, in a sense, to accept nature's implications and continue its work. When a village is built of the local stone, and the harmony is carried on from the church even to the tombstones in the churchyard, the whole often seems such an inseparable part of the country that it appears as if it grew there rather than having been built, thus fulfilling one important condition of good country building that it should appear as if it grows out of its site. Frank Lloyd Wright said that with a house you should not know where the garden ends and the house begins. The sense of this is more likely to be achieved if the house is built or faced with a rock that has helped to determine the nature of the countryside. And as it is one of the hopes in future residential areas that there shall be more a mingling of town and country, this is a pertinent consideration.

Here, then, is, I think, an æsthetic principle which we should follow as far as possible in building after the war. It is one contribution to maintaining and increasing the beauty of our land. Unfortunately, as before indicated, it is a principle which has, to some extent, been ignored since the intense industrialisation of the country, and many a quarry which once supplied its district with a beautiful building stone almost fell into disuse. It is encouraging to note, however, that there seems to be a revival of interest in native

HUGH STEWART HALL OF RESIDENCE, NOTTINGHAM UNIVERSITY. MESSRS. W. B. STARR AND HALL, ARCHITECTS.

stones, and that the stone firms are considering a more enterprising policy after the war.

Britain's Variety of Stones.

Although Britain is a small country, it is rich in the variety of suitable building stones. Most of the building stone is in the north, west and south-west; there is very little east of a line due south from the Humber to the Isle of Wight, that is East Anglia and the south-east. Cities, towns and villages in these areas have imported stones from other districts, London being the most prominent example. If it is found that one stone weathers in a district particularly well, it is often used extensively, and that has largely come to be the stone of that town by association. It occupies the place of a local stone. One can say, almost, that Portland is a London stone.

The principal building stones have been enumerated and described in many geological works, but in order to fortify my arguments it is pertinent to mention the principal groups, and to indicate some that have been used recently on a fairly extensive scale.

The principal group of limestones used for building is from the oolitic strata that run from Portland northward through east Somerset and west Wiltshire, through the Cotswolds, north-east through Northamptonshire and west of Lincolnshire to the Humber. The most famous of the oolitic limestones is Portland stone and the group of Bath stones, but other famous oolitic stones are Doulting, Ham Hill, Ketton, Clipsham, Ancaster, Chilmark and Guiting, all of which have been used in well-known buildings of the past. These stones are mostly pale and warm in colour, being generally creamy, yellowish or brownish hues. Oolitic limestone is not particularly hard when first quarried, but hardens considerably on exposure to the atmosphere, and that is one reason why it weathers so well. It should be seasoned for a period before use, to allow the moisture to dry out. This is the hardening process. Wren used to insist that the stone that was used for St. Paul's should have been quarried at least three years.

The different varieties of oolitic limestone vary considerably both in grain and crushing strain. Basebed and Whitbed Portland and some of the Bath stones like Box Hill and Monks Park are justly celebrated for their fineness of texture and excellent weathering qualities. Many stones of this group have very pronounced fossil markings and some of these take a polish, like Ancaster, Clipsham and one variety of Portland. They thus provide interesting decorative stones for interior work. Douai Abbey Chapel, shown on this page, is an example of Monks Park stone used in this manner.

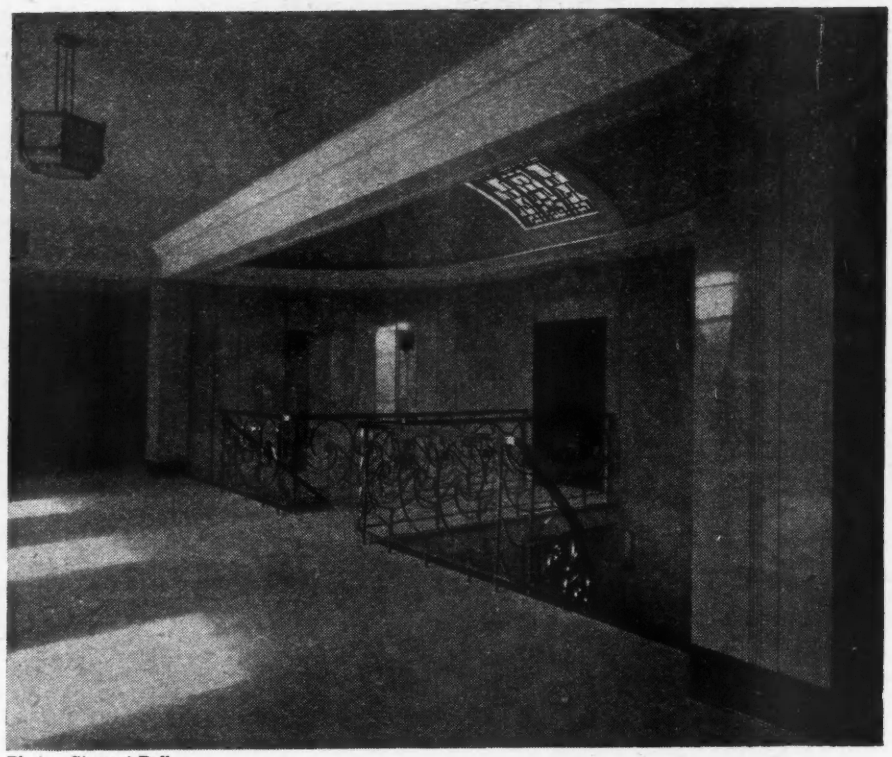
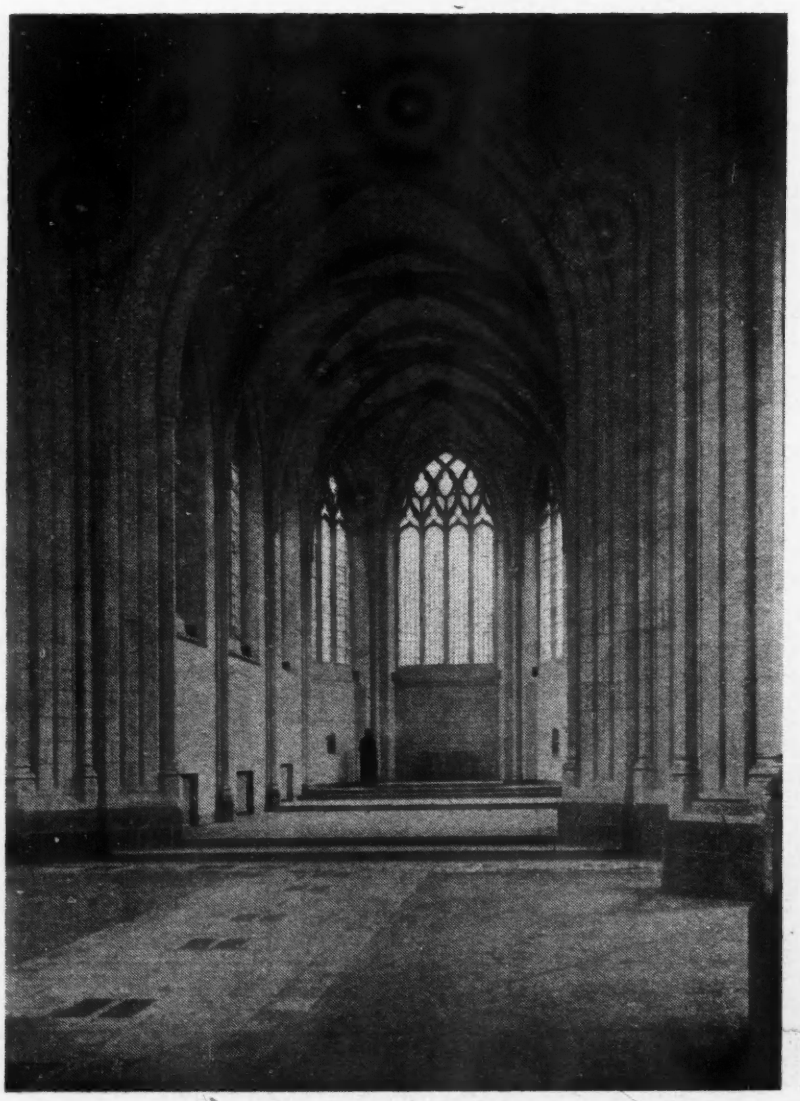


Photo: Stewart Ball.

POLICE BUILDING, DERBY. MR. C. H. ASLIN, F.R.I.B.A., BOROUGH ARCHITECT.



DOUAI ABBEY CHAPEL. THE LATE J. ARNOLD CRUSH, F.R.I.B.A., ARCHITECT.

The magnesian limestones from the strata which run due north and south from Sunderland to Nottingham, although used for many famous buildings of the past, have suffered a little in popular esteem because of the unfortunate weathering of the magnesian limestone used for the Houses of Parliament. But this circumstance, or rather the popular notion of it, is not quite fair to the stone. Bolsover Moor stone was selected by the Royal Commission as the stone to be used, but supplies were inadequate and the building was continued with Mansfield Woodhouse and Anston stones, all of which are magnesian limestones. It is true the stone of the Houses of Parliament is not weathering well, but this is due less to the poor quality of magnesian limestone than to bad selection, and to not always laying the stone with the bed. It is, after all, essential in using any stone that it should be carefully selected and that it should be placed with the bed laid horizontally.

One limestone that does not belong to either of the groups mentioned, but is not only one of the finest stones of this country but of the world, is Hopton Wood stone, a carboniferous limestone from Derbyshire. It is hard, close grained, has a high crushing strain and is a pleasing silvery fawn colour with fossil marks. It is somewhat expensive, but as stone is largely a facing material, this is not such an important consideration. It is being increasingly used for sculpture and for tombstones, and it is surprising that with such a lovely stone in the district any other material has appeared in the Derbyshire churchyards. Yet the harshness of white marble is not unfamiliar. Hopton-Wood stone takes a high polish and for this reason it is increasingly used for decorative interior work, as in Mr. C. H. Aslin's Derby Police Station, shown on this page.

The principal sandstones used in building may be grouped as those from the coal measures, the millstone grits and the red sandstones, the last a colour not a geological classification.

The York and Pennant stones belong to the first group. They are hard generally with a very high crushing strain. The hardness and strength of York stone prompts its use for docks, barracks and prisons, some of the varieties being Silex York, Bolton Wood, Crosland Hill and Robin Hood. The Pennant stones are quarried in the Bristol area. They are similarly hard and strong with colours varying from bluish purple to grey. With these may be included the blue and grey Forest of Dean stones.

The hardness of the Millstone grits is indicated by their name. The chief varieties used in building are Darley Dale and Bramley Fall, the former of which was used in the famous St. George's Hall, Liverpool. They are difficult to work, but their hardness, strength and excellent weathering qualities make this worth while in building where permanence is desirable. Darley Dale stone, for example, was used in the Nottingham University building illustrated on page 547.

The red sandstones, the principal varieties of which are Hollington, Woolton, Corsehill, Wilderness and Mansfield are amongst the loveliest building stones in the country. They vary a little in tone and texture. Red Mansfield in the palest—a pale pastel red—and Corsehill the richest—when damp, a deep crimson. The beauty of Hollington can be seen in Hereford Cathedral, and of Woolton in the new Liverpool Cathedral. The latter is an example of the use of local stone for a great building, for the quarries are not more than five miles from the site.

The brief enumeration has been given to demonstrate the excellent building stones available in many parts of the country, and to show that it is possible to follow the æsthetic policy of using local material to preserve unique local character; and also, by accepting geological implications of scenery, to make our building partially an emergence from its local soil.

AN ARCHITECT'S VIEW OF RECONSTRUCTION

4.—SMALL OR LARGE CITIES ?

By H. V. LANCHESTER, F.R.I.B.A.

A PROGRAMME of national reconstruction that is receiving a considerable measure of public support derives itself from the garden city movement, the principles of which were laid down by Daniel Defoe and popularised by Sir Ebenezer Howard. It is claimed that for many reasons the smaller town is better than the large one, more especially as regards health and the amenities. The case for the garden city of, say, 30,000 to 50,000 inhabitants has already been so fully and emphatically put that there is no need to repeat it here, and it is as element in the reconstruction programme that it makes a renewed demand for consideration.

The question is, Should not measures be taken to terminate any increase in size for our larger towns and would it not be even better, were it found practicable, to reduce them? In substitution a large number of additional more or less self-supporting centres on garden city lines would be established at suitable distances apart on sites carefully chosen having due regard to health, economic advantages, agricultural demands and communications. Many of these would naturally arise from the development of existing minor centres, but the others would be on new sites as the result of the careful studies before mentioned. These would be about 20 miles apart so that each would have its own agricultural zone of some 200,000 acres, a large proportion of which would be usefully employed in provisioning the town.

It has been estimated that about 100 such units could be established in Great Britain, and allowing, say, half of these for the net increase in population, they would provide for, say, two millions, the contention being that these would be more comfortably accommodated than in suburban extensions to the large cities. Nevertheless, we cannot dispense with the latter as appropriate centres for the development of cultural progress. The arts and sciences and other dominant activities demand the co-operation of groups numbering something approaching half a million in the central city and closely around it. Excepting the specialised University towns, which are in a class by themselves, we have in the list of centres already given, about 20 suited to become the main cultural foci for the country, on a scale large enough to provide an organisation including the best type of legal, medical and other professional services, together with chambers of commerce, trade associations, and the higher education in all branches.

The defects of over-centralisation can best be met not by levelling down all subsidiary groups, were such a course imaginable, but by encouraging, on the above lines, regional controls, with well-defined social centres, and the rest of the country plotted out in studied relationship to these on the fundamental requirements of economics and amenity. Present war measures show an appreciation for the need of well-ordered regional control, and it should not be difficult to extend this into the no less vital and more valuable operations of a nation at peace.

Having attempted to indicate in sketch form the general pattern of our country's plan in the future, a plan which, though unlikely to be fully realised, may exercise some influence on the ultimate development, let us now consider the studies that would be required in anticipation of such a programme. From the economic standpoint, the capacity of all areas for industrial, agricultural or pastoral purposes must be investigated, the marketing of the products, and the system of transportation and communication usually termed the "analysis of movement." The School of Economics and other scientific bodies have done a fair amount of work in these directions, but the special undertakings devoted at present to war supplies have introduced an additional factor which will involve supplementary investigations. From these an idea can be formed as to the most advantageous distribution of the people, whether in larger or smaller groupings, which will influence the social demands, such as education, recreation, etc.

Most of these can be adequately met in the smaller town groups, in fact in many ways better than in the larger, from the points of view of hygiene, amenity, and economy, but, as has been indicated, these must all depend on their regional "capital" for support in the higher grades of skill and in the management of communal life. Those living in a fair-sized country town, if a good example of its type, know it as a highly satisfactory dwelling place. The natural beauty of its surroundings, so easily accessible, the quiet orderliness of the streets, the relative dominance of its public buildings and the comparative ease with which the amenities can be protected, are all points in its favour. Even a moderate industrial element is often included without detriment. New towns established on the same scale can hardly expect to provide quite so much of interest, being without the qualities derived from history and tradition, but, on the other hand, they would probably be better planned as to convenience and orderly design. An architect could hardly wish for a more intriguing opportunity than the provision of such a town on an appropriate slice of the English countryside.

Parcelling out the whole country as an organised entity will demand a skilfully framed code of regulations giving the maximum consideration to individual interests that could be afforded without nullifying the principles of the scheme. Pooling of ownership might be demanded to a large extent, but this can be effected without inflicting suffering to a degree that would outweigh the balance against a better communal life. No regulations could be expected to meet all the circumstances in which economics are balanced with social amenity, and such decisions will mainly rest with those responsible for planning and design. Is it going too far to suggest that, given some extension to his social studies, the architect is by far the most suitable professional man to cope with such problems, seeing that probably the whole of his career has been occupied with almost identical ones in the terms of building undertakings? In a hospital, for example, the factors to be co-ordinated are hygiene, organisation and economy. In other cases the factors may differ but they still make mutual claims, while the architect would not go far who had no sense of good living in accordance with the views of his clients as to what provision is necessary to afford the amenities desired.

Having been tempted to diverge from the problems of the large city in order to review the possibilities for our country as a whole, it is essential to complete the picture by such proposals as would bring hope and order into these amorphous and congested aggregations. Everyone knows that these are long overdue, and the recent destructions may be regarded as the match to set going the purifying fire. Therefore, this will be the subject of the succeeding article.

(To be continued.)

THE HOUSING CENTRE

Mr. Clough Williams-Ellis on "Urbanity—or Living in Cities."

Speaking at the Housing Centre on December 9, Mr. CLOUGH WILLIAMS-ELLIS, F.R.I.B.A., said that after the war he believed the proportion of our population living in urban areas would even exceed the present 80 per cent. There was a world-wide drift in that direction correlated with the mechanics of civilisation and with the cultural advantages which the city had to offer. He believed the clean up and redevelopment in the country would be a slower job than in the towns so that these would become more highly magnetic than ever before. Many talked glibly about a reformed agriculture keeping people in rural areas, but any such reform would most likely result in larger and, therefore, fewer farms and in mechanisation and rationalisation generally. All this aimed at lower production costs and a higher yield per man employed. In his view, towns of from 40,000 to 60,000 would become increasingly popular as having the optimum possibilities of urban amenity.

Special holiday camps or country school camps should be organised for town-born children, much as he had seen in Russia. Complementary to this he would take over Knightsbridge Barracks and St. George's Hospital as holiday centres for country children.

THE EAST FRONT, SHOWING NEW WING ON LEFT. *Below*: ANOTHER VIEW OF NEW WING.

ADDITIONS TO "FRESDEN," HIGHWORTH, WILTS.

MESSRS. FARQUHARSON AND McMORRAN, F. & A.R.I.B.A., ARCHITECTS.

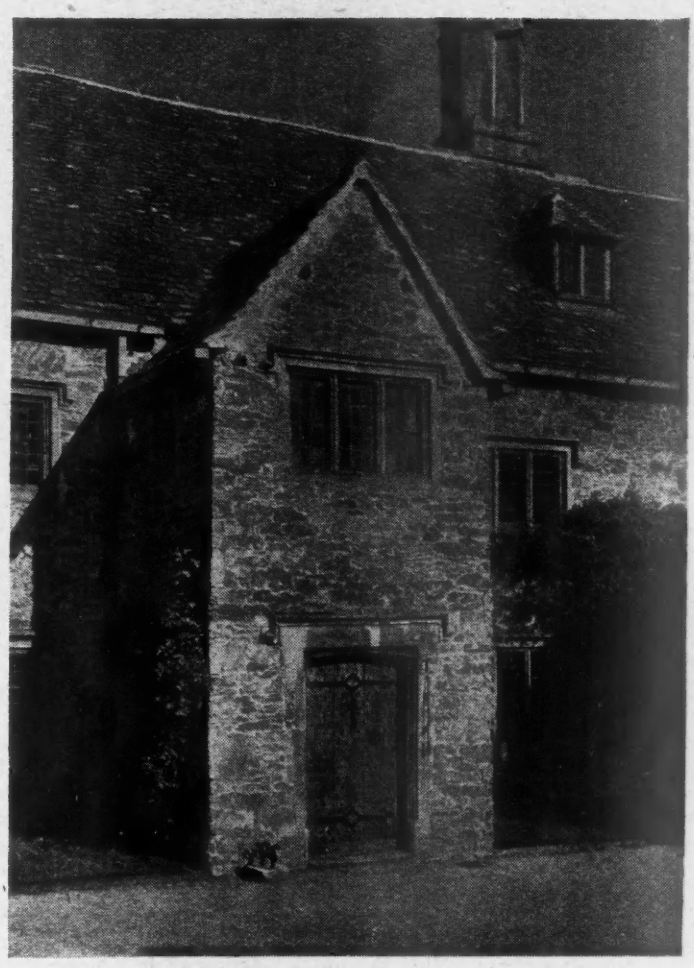
ADDITIONS TO "FRESDEN," HIGHWORTH, WILTSHIRE.

MESSRS. FARQUHARSON AND McMORRAN, F. & A.R.I.B.A., ARCHITECTS.

HALF A MILE OFF THE ROAD RUNNING between Highworth and Coleshill, along a narrow winding lane, bordered by old elms, lies the Manor of Fresden, flanked by its barns and byres, stone walled and stone roofed.

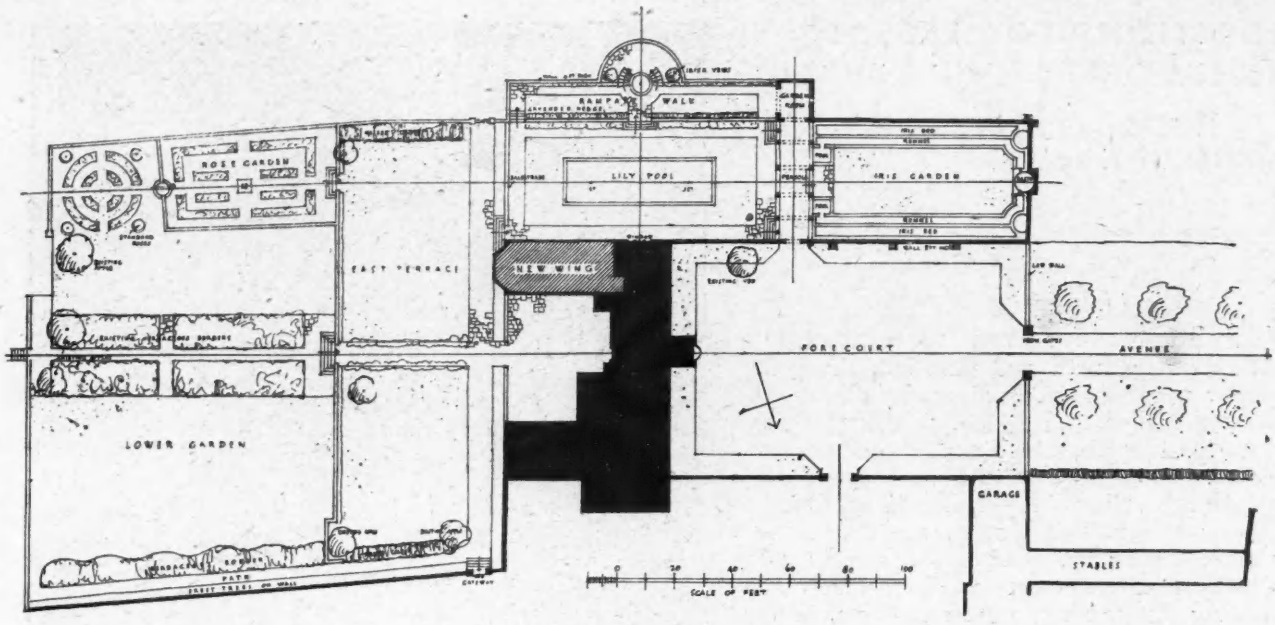
PROBLEM : The principal alterations carried out by the present owner, apart from a general tidying up, consisted of forming the hall by removing some partitions, and of building a new wing, and at the same time remodelling and extending the garden.

In forming a new doorway between the hall and the adjoining room, it was found that the dividing partition was constructed of 6-in. by 4-in. elm uprights, widely bevelled, with stout cill and head, filled in with 1-in. boarding—a completely structural unit from which purely decorative wall panelling naturally developed. The hall is flagged and it is interesting to find how comfortable and warm this can be with rugs on the floor and a large log fire on the open hearth.



THE ENTRANCE PORCH.

THE HALL.



SITE AND GARDEN PLAN.

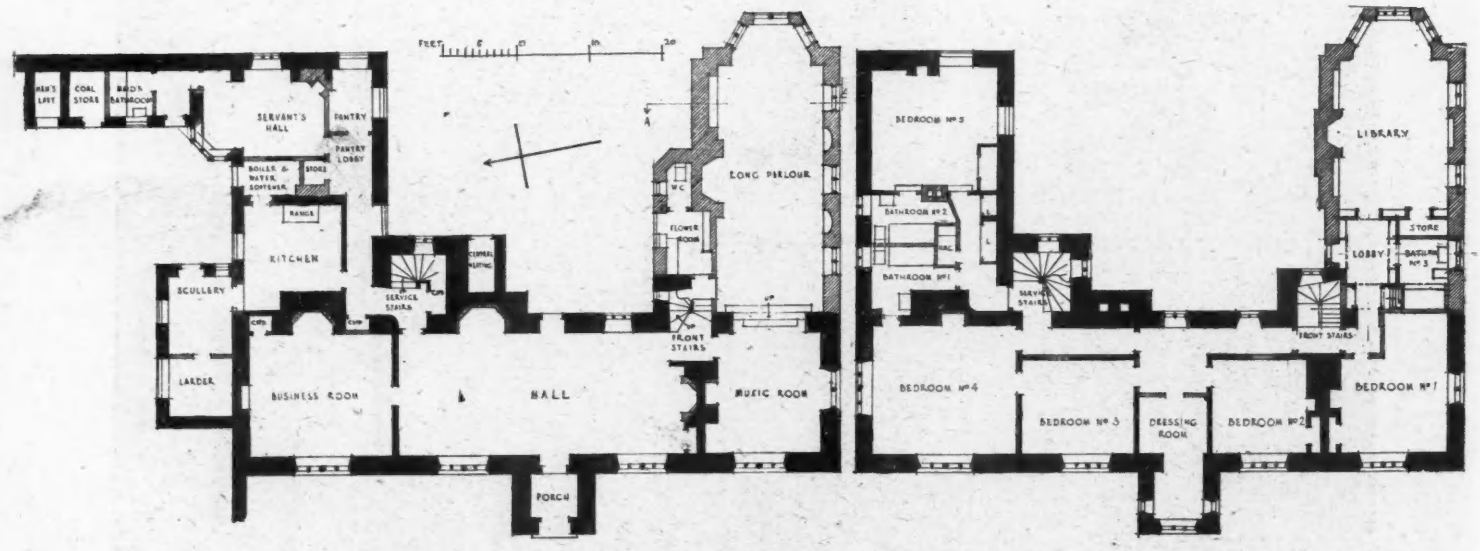
For a small house of this type the rooms are unusually high. The measurement from ground to first floor is 9 ft. 6 in., while from first to attic floor measures 10 ft. There is an interesting old winding elm stair with a central newel.

PLANNING: The new wing comprises a large room (the Long Room) with a Library over. Advantage is taken of the fall of the ground to give extra height on the ground floor by dropping the floor of the long room a few steps below that of the music room. These rooms may be used together or separated by curtains if desired. This room is panelled in pine left the natural colour, and has a wide boarded elm floor. Flanking the fireplace, and in the spaces opposite, between the windows, are glazed cupboards for the display of china, with concealed lighting. The library is completely lined with bookcases of specially treated western red cedar, those at the end being glazed. The bay window at the east commands a wide view over the garden and park. Here is placed an interesting desk made by Heal to the owner's design. From a cupboard in the lobby connecting the new and old portions, a stair leads up to a room over the library, offering a means of escape in case of fire.

SERVICES: The house is warmed by a gas-fired boiler, and the electric lighting is off the grid. Water is pumped from a spring some distance off into large tanks in an old granary, whence it gravitates to the house. These tanks also supply all the water for the farm buildings.

GARDENS: The pleasure garden originally lay only on the east of the house, but when the new wing was built the entrance forecourt was considerably enlarged and a strip to the south was taken in and an enclosed garden formed. Flanking the forecourt is a walled-in iris garden with shallow runnels down each side, so arranged that any portion of the iris beds can be irrigated at will. The water gravitates from an adjacent spring and flows first into a small circular pool from whence it divides into the runnels. The runnels terminate in small square pools which overflow into the lily pool running along the side of the new wing. The iris garden is divided from the lily pool by a pergola, at an intermediate level, which runs from an iron gate in the forecourt wall to a gazebo on the southern edge of the garden and is a home for vines and clematises. Along the south side of the lily pool terrace is a rampart giving a view out over the valley.

Along the whole eastern front of the house is a wide grass terrace, and below are herbaceous borders and enclosed rose gardens. The kitchen gardens lie to the north of the main garden. The garden walling, as well as the building, was carried out by Messrs. Alfred Groves and Son, Ltd., of Milton-under-Wychwood. Mr. Samuel Groves's long experience of Cotswold building was of the greatest assistance. The architects were also fortunate in having a client who combined discernment with enthusiasm.



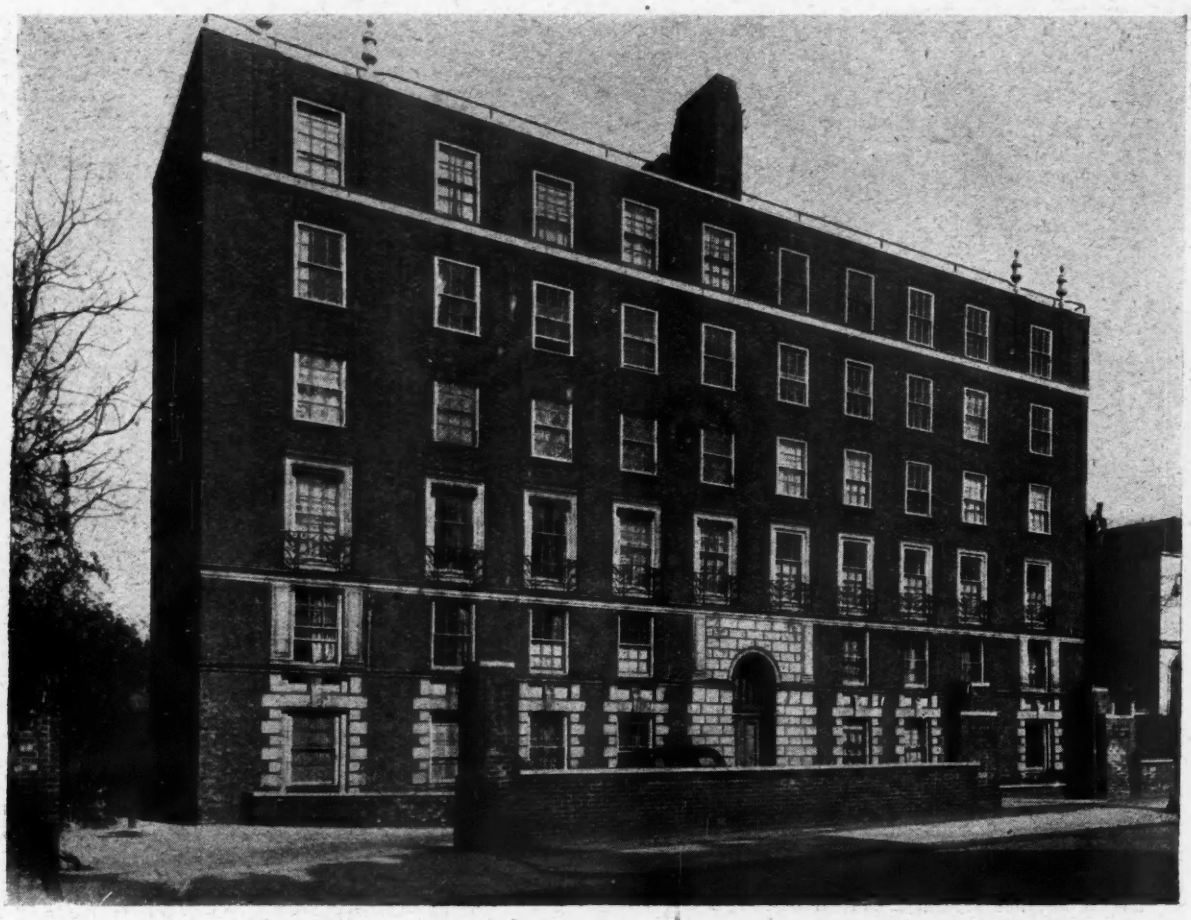
ADDITIONS TO "FRESDEN," HIGHWORTH, WILTS.

DETAIL OF PERGOLA.

VIEW OF ENCLOSED GARDEN, LOOKING TOWARDS PERGOLA.

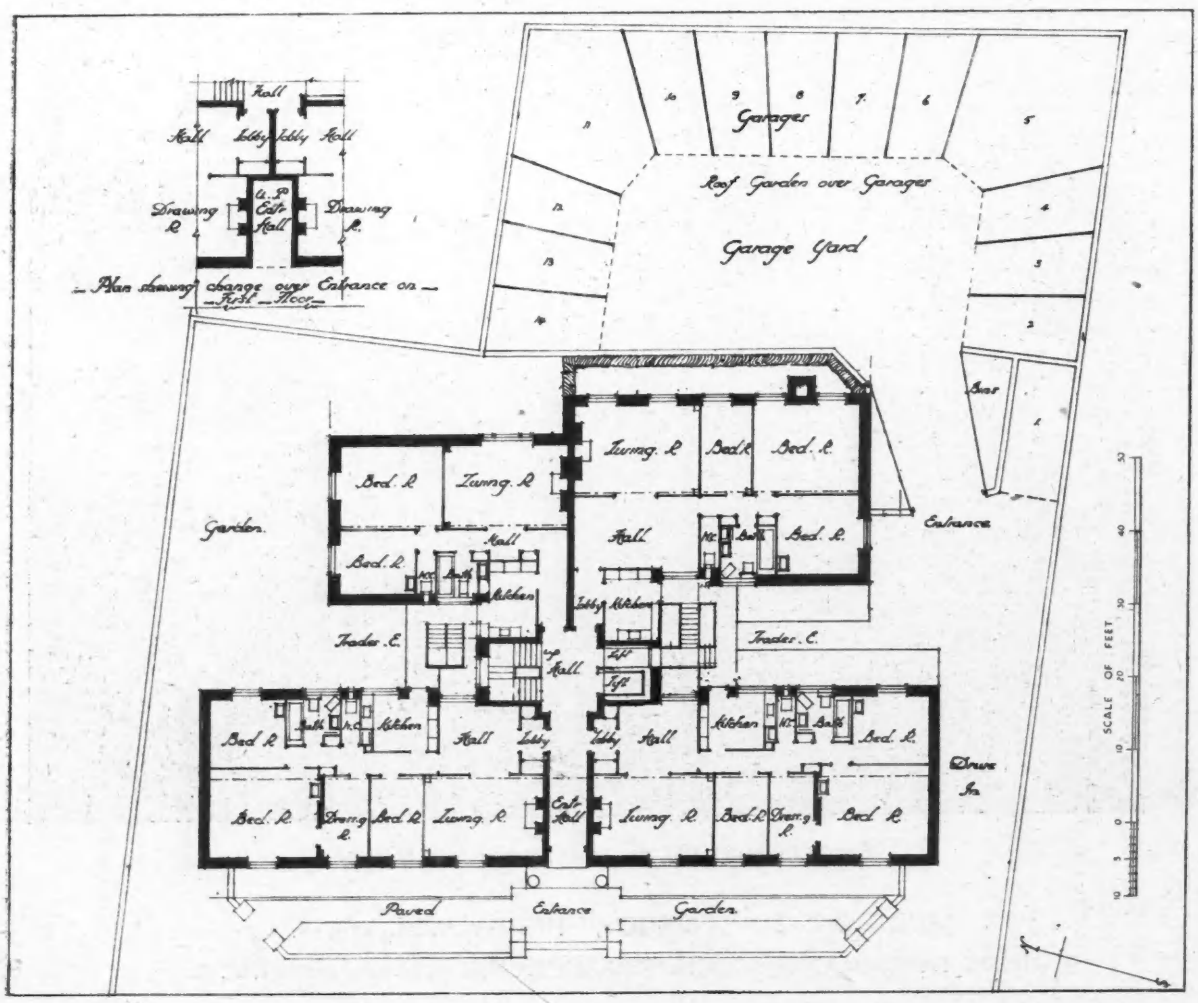
ADDITIONS TO "FRESDEN," HIGHWORTH, WILTS.

MESSRS FARQUHARSON AND McMORRAN, F. AND A.R.I.B.A., ARCHITECTS.



FLATS, ABBEY ROAD, ST. JOHN'S WOOD

MR. W. J. KIEFFER, ARCHITECT.



GENERAL VIEW OF HOSTEL.

HOSTEL FOR AGRICULTURAL WORKERS IN WEST SUSSEX

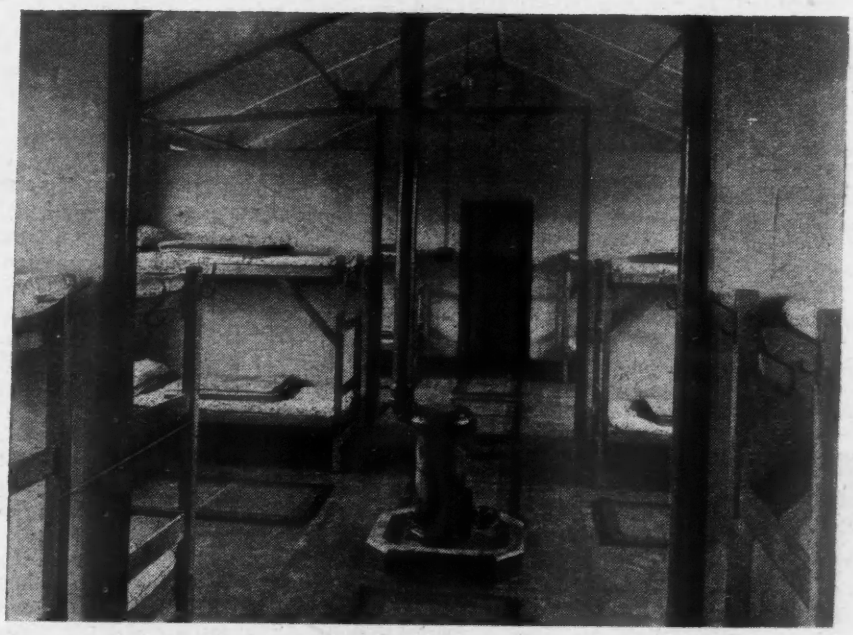
THE ACCOMMODATION OF THIS new hostel consists of a dormitory for 32 workers, ablution quarters, dining and recreation room, kitchen and manager's rooms. The boiler-house is equipped with a coke-fired boiler, and there is access to the cold water tank in the tower; the calorifier is placed in the drying room adjoining. Essential furniture, including bedding, kitchen equipment, crockery and cleaning equipment, was supplied by the Ministry.

CONSTRUCTION.—A local brick was used for the external walls, consisting of 4½-in. outer wall, 2-in. cavity and an inner face of brick on edge with 4½-in. brick or partition blocks for the internal walls. Corrugated asbestos sheets were fixed to the roof on light steel trusses. Standard metal casement windows and doors were used. The lintols over the windows have been rendered with a continuous cement band, as seen in the view of the internal courtyard on page 557.

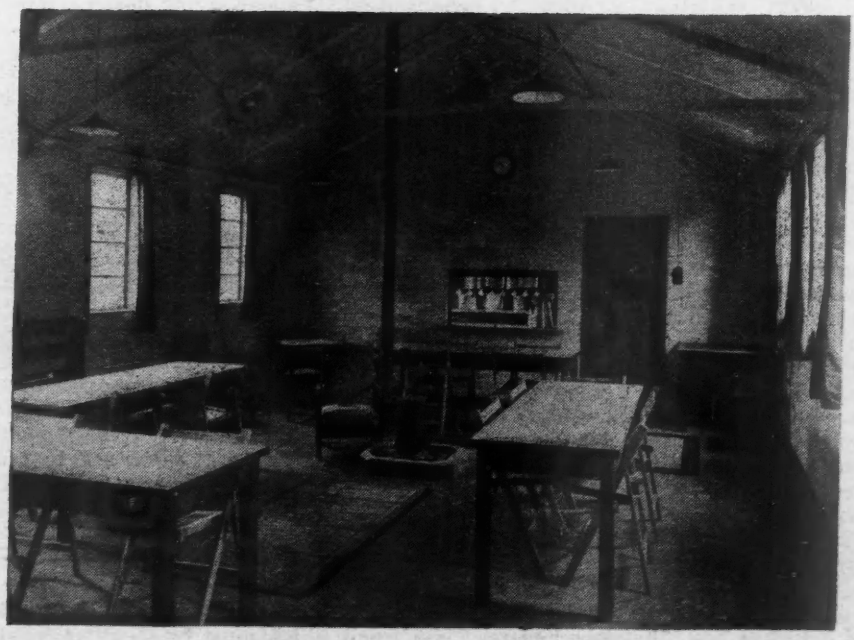
INTERNALLY, the walls are fair-faced brickwork and, together with the ceilings, have been distempered cream; steel trusses are painted cream and the woodwork brown or green. The concrete floors in the dining-room and kitchen have a special finish with a plastic rubber material. The layout of the hostel was planned to suit the site and to give maximum amenities. The builders were Messrs. James Longley and Co., Ltd.

The standard plan to which this hostel has been erected was prepared by the Ministry of Works and Buildings for the Ministry of Agriculture, and was illustrated in our issue for September 5.

MR. GEOFFREY MULLINS, F.R.I.B.A., ARCHITECT.



SLEEPING QUARTERS.



DINING-ROOM, LOOKING TOWARDS KITCHEN.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

"Strange Proposals."

To the Editor of *The Builder.*

Sir,—A very simple question for a very complicated professor: Can Professor Richardson quote a single sentence from any letter published anywhere which proposes that "foreign architects should be invited *en masse* to rebuild England"?

Until he answers this, his shadow-boxing is merely cause for wonder; when he answers it, it may be cause for ridicule.

T. C. Ralph.

13, Chesilton-road, S.W.6.

To the Editor of *The Builder.*

Sir,—The highbrow will always seek out something exotic to support his superiority and because he gets a special kick out of meeting foreigners. Therefore I would like to draw the attention of those architects mentioned by Professor Richardson, in his letter to you [*The Builder*, December 12] to an untapped source of foreign architectural inspiration which is charmingly abstract in feeling and entirely devoid of any historic or or other symbolism: I refer, of course, to the developed igloo style of the Eskimos of the far north.

If any British architect would like to study these architectural thought forms I shall be delighted to put him in touch with my old friend and expert, Nunatak, whose address is latitude 85 degrees North. He tells me there are many good openings there for ardent young men.

Svalbard.

[Our correspondent is a little late with his idea, which has already been adopted by Mr. Martin Wagner, as will be seen from illustra-

tions in *The Architectural Forum* for February, 1941, one of which is reproduced herewith.—Editor.]

Building Organisations.

To the Editor of *The Builder.*

Sir,—The contents of your correspondents' replies last week dealing with our letter are surprising to us.

An organisation which is termed "National," and which, we believe, has been in existence upwards of seventy years, suddenly, through Government registration, finds itself, in our opinion, in an unfortunate position. Agreed it has been the only negotiating medium between the Government and the trade, but one would have thought, for the subscription demanded from its members, that it would have the primary object of applying itself to representing the industry it claims to foster. Take London, for instance, with which our Federation is mainly concerned. Since 1871, we believe, the L.M.B.A. has been the only Federation mouthpiece and branch for the Capital city, and during investigations which were necessary before the Federation of Greater London Master Builders was born, evidence was produced that in the L.M.B.A. at the end of 1940 there were about 250 master builders. Registration has shown that there are in the capital about 15,000. Discounting, if you will, 50 per cent. of this number, is an organisation of 250 members representing 7,500 solid and established businesses all that is needed to call itself "the mouthpiece of the industry"? This does not indicate all the brains, Mr. Orrom!

Such a position in our view is deplorable, to say the least of it, and not only the Government but the public at large are misled. It cannot be denied, and is virtually admitted by everybody, that it has taken this Federation to awaken the L.M.B.A. from its slumbers, which have been of upwards of 50 years' duration.

We would also point out that the National Federation is a Federation of employers and not employees, and when claiming representation in any area account should only be taken of the number of firms represented and not the number of men they employ.

Newton, Bruce and Venning,
Secretaries,
Federation of Greater London Master Builders, Ltd.

23, Compton-terrace, N.1.

Craftsmanship After the War.

To the Editor of *The Builder*

Sir,—I was much interested in the leading article on "Craftsmanship After the War" in *The Builder* for December 5.

Your article dealt with craftsmanship in general, and particularly from the standpoint of the pleasurable occupation of leisure. What I would like to arouse a discussion upon is craftsmanship in the building industry, and particularly from the standpoint of the work which will need to be done by building craftsmen when the war ends.

During recent years the machine has made great inroads into building. Much of the work which craftsmen did with care and pride, with joy in the doing, is now being done by the "iron master."

The old crafts and trades have been largely torn apart. Machines have robbed them of many of the long-tried and subtler methods of doing the work. This process, that turn of skill, the other deft interplay of brain and hand, have been chopped off. Labour-saving devices, new materials, steel and concrete, have degraded the fine craftsmanship which for generations has been the rich heritage of bricklayers, masons, carpenters, plasterers, and other building workers. Standardisation and specialisation have thrown into disuse much of what these workers learnt during long apprenticeship and subsequent varied experience on building jobs.

Not only so, but the rough, speedy and simply utilitarian nature of war-time building production — allowing very limited scope for the display of the better craftsmanship—has given further impetus to the trend towards craft degradation.

Nevertheless, so intricate and complex is building construction that I am certain there is—and must be if we are to have truly worthy, durable and beautiful buildings—plenty of room and scope for craftsmen in the industry.

I regard the deterioration in the craft skill of building operatives as tragic. It is a trend which must be fought against with all our might, especially by those who are responsible for leadership and management in the building industry. It will be sad for our building production of the future if the building trades are to be crowded with a kind of robot class of machine labourers.

Indeed, I would say to all those who are now so occupied with plans and preparations for the rebuilding of our towns and cities and the physical reconstruction of Britain after the war that everything depends on a rebirth of craftsmanship among the rank and file of the building trades.

I would say to the Ministry of Works and Buildings, to town and country planners, to architects, civil engineers, master builders, to all charged with the practical guidance of the industry, that if they really want to build that spacious, noble and glorious Britain they aspire to build, then their basic problem is to revive craftsmanship on the widest scale, in the biggest and highest way, among those who actually do the work. The true worth of building so absolutely depends on the workers. It depends on whether they—the bricklayers, masons, carpenters, plasterers, plumbers, tilers, and the like—have not merely the capacity and skill, but the desire to put their best into the work. Deep interest and joy in work can only be derived from and fostered by the spirit of craftsmanship.

Among other things, post-war building will demand the repair of some of our noblest buildings—ancient guild halls, churches, etc.,—into which the ablest craftsmen of olden times have put some of their finest work in brick, stone and wood. That in itself will call for a revival in the crafts. But that is small in comparison with the immense task of building a Britain in accord with the grand opportunity now offered—of building a Britain in the light of our best knowledge and worthy of our future—on which it is our duty to rise to the highest peak of workmanship, and to build better than ever builders built before.

Luke Fawcett,
General Secretary, Amalgamated Union of Building Trade Workers.
London, S.W.4.

[Other correspondence is unavoidably held over.—Ed.]

IN PARLIAMENT

St. Paul's Churchyard.

Sir Thomas Moore asked the Parliamentary Secretary to the Ministry of Works and Buildings whether authority had been given for repair of any building or buildings in St. Paul's Churchyard; and whether, before giving such authority and with the object of avoiding stereotyped reconstruction on the old pre-fire lines, the matter had been referred to the Replanning Committee of the City Corporation as well as approved by the Ministry.

Mr. Hicks said that two licences had been issued by the Ministry in respect of buildings in St. Paul's-churchyard, one for the provision of heating and the other for water tanks. Apart from this only first-aid repairs had been carried out. The question of a reference to the Replanning Committee of the City Corporation had not, therefore, arisen, but should any applications be made for the construction or reconstruction of buildings in this area, such a reference would certainly be made.

Country Planning.

Mr. Bossom asked the Parliamentary Secretary to the Ministry of Works and Buildings whether a Country Planning Bill was likely to be brought in soon, so as to make it possible to study post-war town and country planning at the same time.

Mr. Hicks said that the importance of planning town and country together was fully appreciated and that this principle would be recognised in the forthcoming legislation.

THE POST-WAR HOME

USING SPACE TO ADVANTAGE.

THE second of a series of twelve papers on "The Post-War Home: its Interior and Equipment," entitled "Using Space to Advantage," was read by MISS ELIZABETH DENBY before the Royal Society of Arts on Wednesday, December 10. MISS H. ALFORD, B.A., P.A.S.I., Housing Manager to the Metropolitan Borough of Fulham, presided. The paper was illustrated by lantern slides. We take the following extracts:—

The solution of space-planning problems in relation to living needs [said the lecturer] is, of course, comparatively easy in expensive dwellings. It is the planning and equipment of low-cost homes, where space is necessarily limited and must be arranged within a more or less rigid economic framework, which calls for real ingenuity and resource, imagination and hard-headed knowledge.

By holding the purse-strings of subsidy, the Ministry of Health has, since 1919, been able to lay down the standard requirements of small dwellings in considerable detail and see that they are carried into effect. The Housing Manuals which they have published from time to time set out the following accommodation "in order of essential importance": Living-room, bedrooms, scullery, larder, bath, coals, w.c., and other accessories, parlour—an order with which we may not all agree! The standard subsidised dwelling has in fact tended in course of time to become the non-parlour, three-bedroomed type, while the normal dwelling built without subsidy by private enterprise has, in addition, usually a parlour and a fourth bedroom. Space has become standardised, based on the legal right of every person to a certain minimum amount of floor area, a certain minimum amount of cubic space. How can this space be used to most advantage?

First, let us consider a plan labelled "South aspect. A good all-round type becoming increasingly popular. The bath and w.c. are accessible from the bedrooms without passing through the living-room." Popular? With whom? Consider this plan for a moment from the point of view of the woman who will have to run it, the man who will have to pay rent based on the construction costs, as well as weekly outgoings for gas, electricity and coal based on the type of equipment installed. You will see that the tiny scullery contains no less than five doors, the back door (which, they say, faces north) being close beside the sink, facing the door which communicates with the living-room, so that the housewife will work in a constant icy draught. All coal must be brought into that scullery and shot into a cupboard on the far side of the larder. For some undisclosed reason there is a step *down* into the bathroom. The only equipment in this workshop of the house is a sink, nor is there room for more, the wall-space being taken up by doors. Cooking must be done on the range in the only living-room, and the water is either heated behind that range or the copper must be lighted before one drop of hot water is available, plumbing presumably being distributed through all the three downstairs rooms. Upstairs, the bedrooms have no cupboard space at all, and are designed without the slightest apparent regard to the furniture which civilised families require.

My second example is chosen to show the effort—surprising and shocking to me—which has been made to prevent working people from eating in the room in which the ordinary work of the house is done. The caption reads, "Type of small house, *not generally desirable* (my italics), from which the Scullery is omitted to make room for a Parlour." From my own point of view this is one of the most liveable plans in the Manual, the main disadvantage being that everyone must go through the living-room to get to the w.c. or the bathroom. I simply cannot understand this conspiracy against the dining-kitchen. In plan after plan one finds this most natural and wholesome tendency baulked by an artful scattering of equipment about the scullery which, well arranged, would be admirable for the purpose.

I consider that a house should always be planned with two separate requirements in view. First, the private part, to meet the needs of the family in its personal life. Secondly, the public, workshop side from where the housewife carries on her highly specialised and skilled job. Distinct in function, of equal importance, neither can be ignored without impairing the power of the other. Within this definition, speaking broadly, I believe that "living" function varies very little between different income-groups and occupational groups, whereas there may be wide variation between their "working" needs.

I believe in indicating quite plainly what is the purpose of every part of a home. "This room," I would say in effect, "is the living-room. In it you can easily relax and be jolly. It is well insulated, so you need not be afraid of disturbing the people next door. It is large enough for all the different things you, as a family, will be interested in, as well as for entertaining your friends. It is easy to warm: the open fire burns smokeless fuel, and is lighted by gas-jets, so that there will be no laying of sticks and paper, no blackleading, no flues to clean. There is no built-in equipment, so you have plenty of room for the kind of furniture you really like. The room leads on to the garden (or the balcony, if it is a flat), gets the afternoon sun, and is sheltered from the view of the next-door people, so you can potter about in or out of doors just as you like without being overlooked." "The kitchen," I would say, "has been meticulously planned and equipped for working. You will have to provide only a table and some chairs. The equipment has been arranged in logical sequence so that you will have to take very few unnecessary steps. Being at the front of the house, you can, while you work, see what is going on in the street, and can therefore escape that feeling of isolation and boredom which you can hardly fail to have when your workshop is pushed among the dustbins at the back. In fact, in this house there is no back. There is the street side and the garden side. Downstairs, too, there is a small cloakroom and cupboard space. Upstairs the bedrooms have been planned round your furniture. But there is no need to buy wardrobes or linen cupboards—they are part of the plan. And though the bathroom is small, it is adequate for its purpose."

My first axiom in planning, after seeing that the rooms are well-proportioned, well lighted, well ventilated, is, "group the services." Group them as tightly as possible, to eliminate the maximum of plumbing. I am, in fact, the plumber's worst friend. Nothing makes me more scornful, when I look over a house or flat, than to see yards of unnecessary pipes festooning walls, passages or larders.

What kind of finish do I suggest? Very light surfaces will, of course, give the greatest effect of space, the least feeling of cramp. So, pastel tones. And, fortunately, this is not in fact an extravagant or labour-making finish, as is commonly supposed. On the contrary. Some eight years of experiment and observation have shown me that a washable surface such as paint looks shabby less soon in a light than a dark colour because it does not show the light under-plaster when it is chipped; it is easy to wipe over; it makes much better use of natural as well as artificial light; it gives a surprisingly greater feeling of serenity as well as of space.

VIEW LOOKING INTO INTERNAL ANGLE.

HOSTEL FOR AGRICULTURAL WORKERS, WEST SUSSEX.
MR. GEOFFREY MULLINS, F.R.I.B.A., ARCHITECT. (See page 555.)

Handbook of Home-grown Timbers.

In response to numerous requests the Forest Products Research Laboratory of the Department of Scientific and Industrial Research has just issued a third edition of the "Handbook of Home-grown Timbers" (H.M. Stationery Office, price 1s. 6d. net). This new edition includes a number of timbers which, although generally neglected in peace time, can be satisfactorily employed for various useful purposes under war conditions. The whole of the text has been revised to include the results of recent research, and a new feature of the present edition is the information on the fire-resisting properties of most of the species, which it has now become possible to include as the result of extensive experimental work since the second edition was compiled. Home-grown timbers are now being employed in greater quantities and for very exacting purposes, and users are frequently at a loss to know how a particular species may best be utilised for some specified purpose for which imported timbers have been used in the past. The Handbook is a reliable guide in such circumstances.

Building Position in Eire.

The Eire Prime Minister, Mr. de Valera, received a deputation from the Federation of Builders, Contractors and Allied Employers of Ireland, which discussed with him the present position of the building trade and the possibilities of obtaining supplies of essential materials from overseas, with special reference to the availability of shipping space.

CANTEENS AT WORK

Canteens at Work. Planning and Running the Modern Canteen. By C. G. GARDINER. (London : Humphrey Milford.) Price 4s. 6d.

The war has given a tremendous impetus to industrial catering. Efficient feeding arrangements are proving to be one of the greatest spurs to increased output and labour contentment. The field is one in which experience is young and information scanty. "Canteens at Work" will help considerably in filling in the gap, for it is a book which provides in compact, simple form the basic information necessary for equipping and running a modern canteen. The author—as managing director, National Catering Service, London—is one of the leading authorities in the country on canteen planning and equipment. He has worked with a team of specialists, who, under his leadership, have pooled their experience and have covered every phase of catering—planning and equipping, accountancy, buying, kitchen and staff management—and have first-hand acquaintance with "war feeding."

The book is in nine sections. The first six deal with layout, design, and equipment of the canteen—kitchen, subsidiary offices, and dining hall—and with the all-important question of tea service. The last three deal with practical running—staff, food, and finance. Specifications are given. Twenty-six photographs, as well as a number of useful plans and charts, are reproduced. At the end is a comprehensive "Standard List of Equipment" for canteens for 250 to 2,000 people. Accountancy forms are also shown, and specimen menus, and there is an index. One of the diagrams is reproduced below.

Institute of Quantity Surveyors' Diary.

This Institute sends us a copy of its Diary for 1942, published from its headquarters, 5, Leicester-street, Wolverhampton, Staffs. It is a most useful and up-to-date pocket-book.

WEATHERPROOF WALLS

CONCLUSION OF MR. FITZMAURICE'S PAPER.

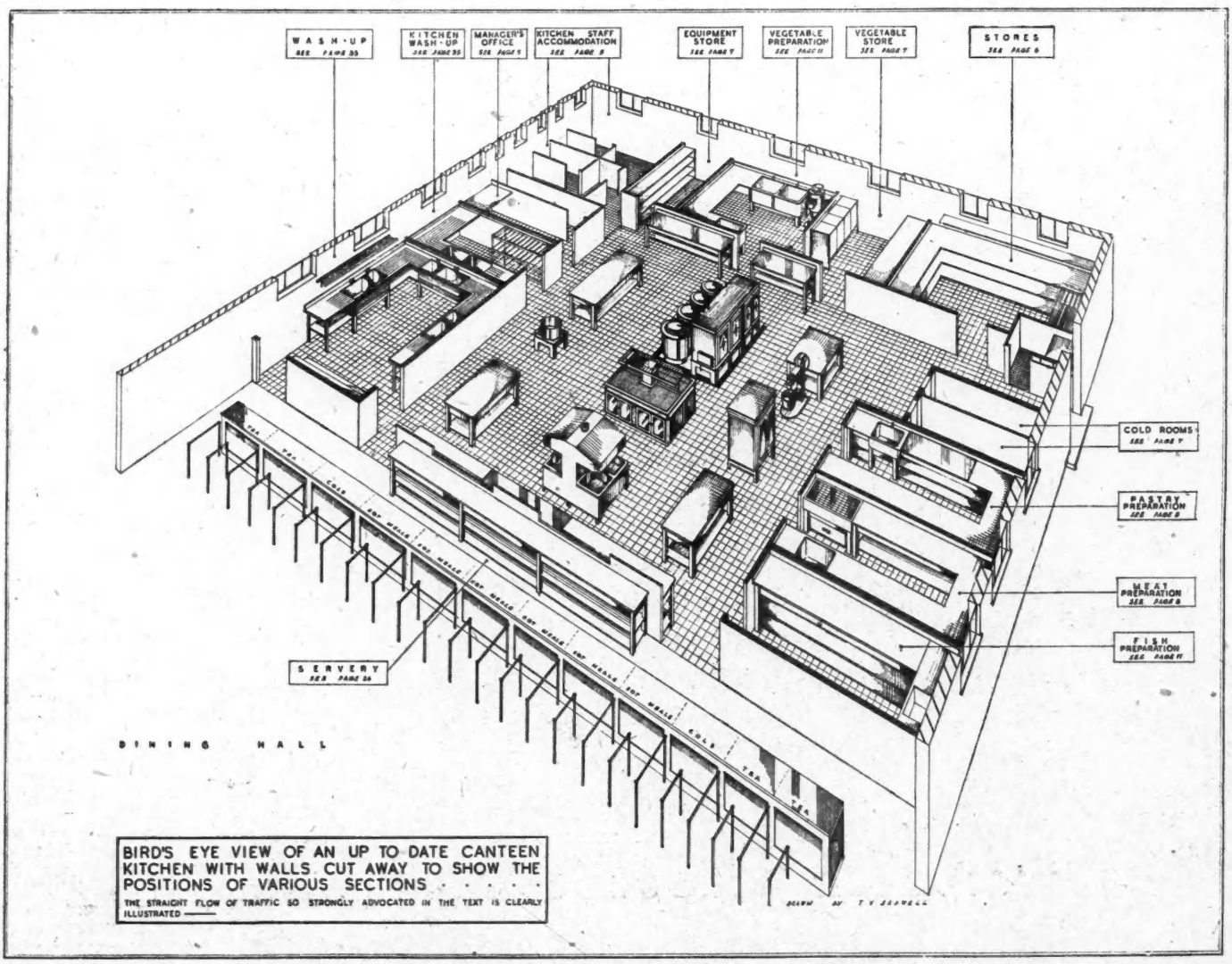
Now concluded is Mr. R. Fitzmaurice's paper on Technical Research in Weatherproof Walls, read at the Building Centre and begun in our last issue.

Mortars.

STARTING at the extreme end of the scale, if you must use a very dense, impervious unit, I think you should use a pretty dense, impervious mortar, and you come to something in the range of a strong cement mortar. Something in the range of one to three and a half is an appropriate mortar for that type of unit, but please do not say I told you you would get a dry wall, because you are apt to get shrinkage in the joints. For bricks or stone of medium strength, coming down the scale, you have a range of cement-lime mortars, which will, I think, fill the bill. They will give you reasonable results for strength. You can start off with about one part of cement, three parts of lime and twelve parts of sand, and you can come down to one part of cement, one part of lime and six parts of sand. That would be appropriate for bricks of medium to high strength, and 1-3-12 for bricks of medium to low strength. I think when it comes to the brick of low strength and high porosity—because the two things very often go together—there is no great advantage to be gained by going to the most porous mortar possible. I would suggest that you get a little cement in the mix, for other reasons than waterproofness, and use a cement-lime mix somewhere of the order of 1-3-12, but I do not think it is the slightest use to take a very porous unit and use a very impervious mortar. On the other hand, I am quite convinced that it is not the slightest use to take a very impervious unit and use a very porous mortar. If you try to get the two things together as well as you can, I think it is likely to give the best results.

Rendering.

I should, I think, say something about the problem of the rendered building. Some people use renderings for architectural effect—they like to have clean surfaces of uniform colour and texture—and some people use renderings to keep out the rain. The problem of renderings is undoubtedly a difficult one. There is no difficulty in getting a rendering which is sufficiently impervious to keep the rain out. It is perfectly easy to get everything you want in that way. The problem with rendering is to stop it cracking. When a rendered wall cracks you get in many cases a worse condition that if you had no rendering at all. What happens is this: a dense rendering has no absorption; the water streams on the face of the wall, and where there is a crack it turns in, thus soaking the wall behind the crack. When fine weather comes your unrendered wall loses water by evaporation and the water does not necessarily go right through. A dense rendering on a wall prevents evaporation; it keeps the water which penetrated in the rainstorm inside the wall. The next storm comes



BIRD'S EYE VIEW OF AN UP TO DATE CANTEEN KITCHEN WITH WALLS CUT AWAY TO SHOW THE POSITIONS OF VARIOUS SECTIONS . . . . .
THE STRAIGHT FLOW OF TRAFFIC SO STRONGLY ADVOCATED IN THE TEXT IS CLEARLY ILLUSTRATED ——

REPRODUCED FROM "CANTEENS AT WORK", REVIEWED ABOVE.

WEATHERPROOF WALLS (continued.)

along and the wall gets a bit wetter, until finally it is waterlogged.

So one has to face up to the fact that rendering is not entirely easy, and it can in a bad case be worse than no rendering at all from the point of view of weather-proofness.

What are the factors which control the shrinkage of rendering and how can one overcome them? The modern tendency is to use combinations of Portland cement and lime in external renderings. The Portland cement-containing material must, by the nature of it, shrink, and it will very often build up sufficient stresses, due to shrinkage, to make it crack. How are you going to get over that? The thing you should aim at is to get perfect uniform adhesion to a backing which does not shrink, and good brickwork we can regard for all practical purposes as a non-shrinking material. If you get perfect adhesion to the backing there will not be any cracks, because the shrinkage is restrained at every point on the wall surface. However, this is not a perfect world; we do not get a uniformity of adhesion, and in point of fact we are very liable to get shrinkage.

Now, why should it be an advantage to use a weaker material, to dilute our cement with a certain amount of lime? I am inclined to think the argument is rather this way: the shrinkage which must take place distributes itself by a large number of very fine cracks round individual sand grains and so on. The material is so weak that it cannot build up high stresses.

Shrinkage of Concretes and Mortars.

Scientific work at the Station on the shrinkage of concretes and mortars has shown us that the phenomenon known as creep—the material deforming or flowing under stresses kept on it for a long time—is less with the stronger mixes. Creep is a thing which from the point of view of supporting a load is a disadvantage, but from the point of view of preventing cracking is a great advantage. With rendering material, from the point of view of control of cracking, you want the maximum creep that you can get. There is no doubt, I think, that the creep, that is to say, the capacity of the material to flow plastically under load, is greater with weak materials, and thus there is less likelihood of cracks forming.

The question of curing of rendering is quite an important one. It used popularly to be supposed that if you wanted to prevent cement rendering from cracking the thing was damp curing. That was by analogy with the setting and hardening of concrete, when damp curing was the best thing. Therefore one inferred that it was necessarily the best thing for rendering, that cement rendering would behave better if kept damp. I have to confess that for many years the Station subscribed to that view. In point of fact it is not correct for a rendering. By giving concrete the best conditions for developing its strength you reduce the creep; it becomes too strong too quickly. It is less able to relieve shrinkage stresses by creep, and therefore is more likely to crack. So we have this apparent anomaly, that damp curing, from the point of view of the cracking of rendering, does not seem to be the ideal. On the other hand, I think perhaps one should say that the opposite condition of extremely violent drying conditions is likely to be equally bad. The material will probably shrink and crack before it has had any opportunity of developing any strength whatsoever. That is equally bad, so again you must take the middle course.

Materials for Rendering.

I want to make a few remarks as to the nature of the material on which you are going to render. There is a common delusion that any old brick is good enough to put a rendering on. I am inclined to think that is a mistake, and that perhaps the opposite attitude would be the proper one. Even if one does not go to the length of saying you want a particularly good brick for rendering, you do not want a particularly bad one, but there again one must enter another caveat. It never does to lay down the law too hard and fast. I would say that if you are not going to be careful about your choice of brick then you have got to be very careful about your treatment of a considerable number of details, because you will find that most of the diseases of rendering are due to rain having got behind the rendering in one way or another. There are ingredients in bricks which quarrel with rendering. They remain dormant until the moisture gets to them and then you may get a quarrel between certain constituents in your brick and your rendering.

Vulnerable points are, I think, parapets. Time and time again the fatal mistake is made of carrying the rendering over the top of the parapet and down the back and assuming it is a watertight job. Rendering may just hold out on a vertical surface, but it never does on a horizontal one. I do not think one need have the slightest hesitation in saying that for rendering work you must weather horizontal surfaces properly with asphalt, lead, zinc or copper. I rather question whether an impervious tile is quite the thing, because you set yourself rather a problem with the joint. Continental countries have exploited renderings probably to an extent far greater than we have. They would never dream of continuing the weathering from a sill or a coping to a parapet. I feel convinced that a great many faults which occur in our buildings could be avoided if we paid considerably more attention to weatherings.

Treatment of "Junctions."

Finally, there is one factor which has, I know, given a considerable amount of trouble in practice, and that is treating the junction of the impervious rendering or reinforced concrete wall with the window-frame. I have no suggestions to offer you as to the correct way of treating it. One could invent things which a practical man would say were far too elaborate and quite absurd and not to be entertained. If you look at a window manufacturer's details you will see in a number of places the mystic word "mastic." Mastic is a material which has got to remain sticky throughout its useful life; it has got to stick to such vastly dissimilar materials as steel, cement, concrete or brick, and it has got to do that indefinitely or else the rain gets into the building. I am afraid that the answer in many cases is that the rain gets into the building, and when you combine that with the fact that there is rather a vogue for putting windows right out on the face of the wall, it makes it a little more difficult. I would not like to suggest for an instant that there is not a solution, but if anybody asked me what my solution was I would say, "I have not got one. Go to the Building Centre and hope for the best." So much for rain exclusion.

There is another point about weather-proofness. We spoke about wind and the importance of avoiding the transmission of wind through cracks. You might be interested to know that in the United States metal windows are specified actually in terms of the amount of wind which will pass through the closing parts. There are actual specifications and windows are graded according to the amount of wind which gets through. That is an interesting point and one which I think is worth developing in this country.

Heat Retention.

The other thing is the retention of heat How important is heat insulation in walls? We all of us see copious quantities of literature advocating this and that insulating material. It can be added to, it can be stuck on, it can be built on, and a hundred and one things can be done with it. Now, when do you want to use this insulation? It is a question, I think, which every man should consider for himself in consultation with his own heating engineer. In a building most certainly the heating engineer should have his say, because he can calculate what the heat losses will be. I would like, for the benefit of people who do not feel that the job merits the trouble of calculating their losses in detail, to put it in this way: It is no good going to the extent of a tremendous outlay in heat insulating material so long as your wall has a window in it, because at best the heat insulation of a single glazing is so poor that the windows will be the main factor in determining the heat loss through your wall. One cannot exclude the part played by the solid part of the wall, but the window is the dominant thing, and even if you double or treble the insulation of the non-window part of the wall you will not make a tremendous difference to the heat loss. One wants to keep a sense of perspective there, and as in other things I think one should take a mean course. The wall with the greatest thermoconductivity in practice, I suppose, is the thin reinforced concrete wall. That will probably need some good heat-insulating material, which is not always easy to find. I think if you took an average 11-in. cavity wall in all

IMPORTANT NOTICE TO READERS AND ADVERTISERS

Reduction in size of Type Areas

In order to comply with the "Restriction on Paper Order" and at the same time avoid as far as possible reduction in supplies to those readers who have placed a regular and accepted order for "The Builder," it will be necessary to reduce the size of the page commencing with the first issue in January, 1942. In consequence of this change, the new type areas of advertisements will be as follows:—

WHOLE PAGE - 10" deep x 6½" wide
HALF PAGE - - 10" deep x 3⅛" wide
HALF PAGE - - 4⅞" deep x 6½" wide
QUARTER PAGE - 4⅞" deep x 3⅛" wide
QUARTER PAGE - 2⅜" deep x 6½" wide
EIGHTH PAGE - 2⅜" deep x 3⅛" wide
EIGHTH PAGE - 1⅛" deep x 6½" wide
SINGLE COLUMN width - 2⅛"

Readers will find no substantial alteration from the current presentation of Editorial articles, illustrations, etc., as the matter will be printed in a slightly smaller type.

WEATHERPROOF WALLS (continued.)

probability the heat insulation of that wall would meet the requirements of our climate fairly well, and with the ordinary distribution of windows I do not think you need add to its insulation. Given an exceptionally exposed site in perhaps a more northerly latitude than London, one might have to review that finding, and say that some insulation would increase the comfort to an extent which would make it worth while. However, in the ordinary course of events I do not think you will find it will make an enormous amount of difference to the comfort of the occupants of the room.

Replies to Questions.

MR. FITZMAURICE: I think colourless waterproof compounds have a useful function. For instance, you have a pleasant facing brick, a nice elevation—we will say a solid wall, and the water goes through like a sieve. What can you do with it? You can treat it on the outside with something, and the only thing which is not going to spoil the look of the building is a colourless waterproofer.

What are the limitations of the colourless waterproofer? It has often been stated that new brickwork will let in the rain for the first season or two, whereas afterwards it will give no trouble. There are many people with profound experience of building who are quite convinced that that is so, and their standing is such that I would not dispute it for one moment. I am inclined to think the reason is that when you build a building you introduce an enormous quantity of water into the walls during the building operations. If you get an additional source of water from the outside while that water is still there you may imagine that you very soon get moisture appearing on the inside. It is possible that in the first season before the moisture of construction has had an opportunity of drying out a colourless waterproofer applied on a day when the wall is fairly dry, on the outer face, may just make all the difference between penetration and no penetration. The tests we have made at the Station have shown that a colourless waterproofer cannot be relied on as a permanent treatment. The poorest of them have lost all effect in something less than six months, and the best go on for two or three years. One cannot expect that a colourless waterproofer, one which you really can call colourless, is going to be effective for very much longer than five years, supposing one gives five years as the maximum, but nevertheless it will tide you over that very awkward time in the early history of the building.

I have not seen a paper reporting an efficient treatment lasting as long as 12 years. On this subject we have to keep to our own work at the Building Research Station, and the materials which we have submitted for tests. The results we have obtained have led us to assume that five years is about the maximum.

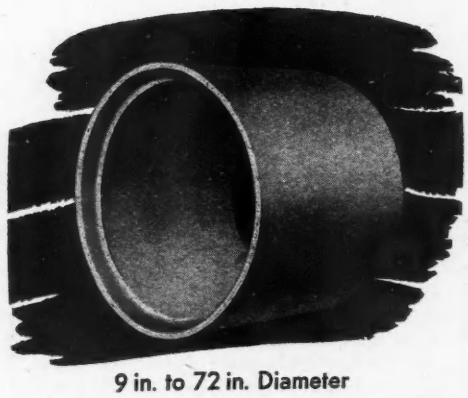
The treatment of the inside of a wall with a waterproof cement is a very interesting solution. It works in a good many cases, but what I rather feel about that is that you never know where you are going to finish. You waterproof the inside with waterproof cement; that keeps the water in the wall, and the tendency is that it creeps along the cross wall. In fact, by waterproofing the inside you stop evaporation to the inside. You make a bit of the wall a bit wetter and the water creeps round your walls. What you see first of all is a strip of waterproof cement at the cross wall, perhaps 3 ft., and then you see another strip perhaps 6 ft., and so on, till really by the time you have finished you have a whole building with waterproof cement. I have actually seen cases where four applications of waterproof cement have to be applied to the cross walls; they had simply chased the water further back. I do not say that would happen every time.

We have made a lot of tests of the thermo-conductivity of bricks, and I think the difference between the actual thermo-conductivity—that is, the transmission of heat through various different types of brick—is not sufficiently great to be considered. I have not got the figures with me, but probably a range of about 20 or 25 per cent. would be about the maximum difference between the highest thermo-conductivity and the lowest in bricks and brickwork.

When you use a dense, heavy brick you introduce another factor, an important factor from the point of view of comfort, and that is the heat capacity. The heat capacity may be defined as the quantity of heat required to raise the material through certain ranges of temperature. If you have a very dense brick as opposed to a relatively light porous brick, I think you will probably find that the heat capacity of the dense brick is greatly in excess of the heat capacity of the light one, and that a room with the dense brick would heat up less quickly than a room with the lighter one. One would expect that the plaster would play an important part as well, because the plaster is the part of the wall which first receives the heat. It has been shown quite definitely that wood panelling in a room has a very great effect on the comfort of the occupants, and that the walls heat up very much more quickly than with an unpanelled wall with its very much higher heat capacity.

(Concluded.)

CROFT ADAMANT
GRANITE CONCRETE
SPUN PIPES



9 in. to 72 in. Diameter

JUNCTIONS, BENDS, TAPERS, MANHOLES, GULLIES

Particulars and Prices from—

CROFT GRANITE, BRICK & CONCRETE CO. LTD., CROFT, Near LEICESTER.
Telephones: NARBOROUGH 2261-2-3.

London Office Transferred to:
57, ROSEBERY AVENUE, LINSLADE, LEIGHTON BUZZARD.
Telephone: LEIGHTON BUZZARD 3228.

Branch Office and Works:
WEST BANK, WIDNES.
Telephone: WIDNES 2656-7.

ALWAYS SPECIFY CROFT ADAMANT

SOCIETIES & INSTITUTIONS

ILLUMINATING ENGINEERING SOCIETY.

IN a paper on this subject MR. H. C. WESTON said that as soon as State regulation occurred the stage of central planning for reconstruction was passed for the time being, and the stage of administration was reached. "Factory lighting," he added, "is unique in having reached this stage, for we can hardly regard the war-time restrictions in other fields of lighting as marking a similar stage in the process of reconstruction!

"The statutory requirement of sufficient and suitable lighting in all factories is general enough to be interpreted in terms of the ideal. But the intention of existing legislation is not in this sense, though future legislation may be more so. We have seen that the present Lighting Regulations do not exclude the possibility of conditions which are unsatisfactory at least in war, and probably also in peace. But, reasonably interpreted and enforced, they do involve extensive reconstruction and the eventual abolition of grossly defective conditions of lighting in factories.

"The rationalisation of industry, as part of the more rational order we may hope will emerge from the present upheaval, requires, however, that reconstruction shall aim to achieve the establishment of optimum conditions. In general, this involves the naturalisation of artificial lighting to the extent that light sources, whether primary or secondary, become unobtrusive in virtue of their size, brightness or location; that the brightness levels in all parts of the interior are apparently proportional to those agreeable in daylight; and that the quality of light preferably resembles sky-light. This is not a counsel of perfection, for we have seen that already its realisation is being closely approached in some factories."

OBITUARY

William Sirey.

We regret to record the death, on Friday, December 5, of Mr. William Sirey, who had been closely associated with the building and civil engineering industries, especially during the past 20 years.

William Sirey, who was born in Carlisle 54 years ago, and educated there at the Higher Grade School, entered the firm of John Laing and Son, Ltd., 38 years ago, becoming a director of the firm 17 years later. Before becoming a director he was responsible for the construction of some of the largest works that the firm carried out during the years 1914 to 1918—among others an aerodrome at Crail, in Fifeshire, which, under his able supervision, was completed ready for occupation in 4 months 20 days. Later, when Mr. Sirey became a director, he was mainly responsible for the direction of the office and the preparation of estimates.

"To all who knew him," writes Mr. J. W. Laing, "he will be remembered for his wise caution and an imperturbable disposition, being neither excited by success nor dismayed by difficulties—a man of quiet Christian faith and conduct. His counsel made him a tower of strength to his fellow directors."

The interment took place at Hendon Park Cemetery, following a service at Woodcroft Hall.

S. Naylor.

The death took place on December 5 of Mr. Sam Naylor, managing director of Lumby's, Ltd., of Shaftesbury-avenue, W.C.2. Mr. Naylor, who was 77, joined the firm as an office-boy in 1875, and in 1896 was made a director, later becoming chairman. He was a past-president of the Institution of Heating and Ventilating Engineers; a member of the Institution of Mechanical Engineers, and a member of the British Standards Institution. He had been chairman of the Greetland District Council in 1916, and was a keen Freemason, being a Provincial Assistant Director of Ceremonies.

B.S. Data Book on Cast Iron.

Just issued from 28, Victoria-street, S.W.1 (price 5s. 5d. post free) is British Standard Data Book on Cast Iron (B.S. No. 991).

A.R.P. SCHEMES

LONDON.

Kensington. — B.C. placed contracts with following for shelter work: Keith and Blackman, Ltd., at £1,091, for ventilating work; Alexander Thompson and Co., Ltd., at £168, for waterproofing; F. G. Minter, at £393, for strengthening public shelter; Frank Brown, Ltd., at £585, for adaptation of premises as public gas cleansing station.

PROVINCIAL.

Corby.—U.D.C. propose strengthening four basements for public shelters. Plans by D. W. Greaves, S.

Coventry.—T.C. to instal electric heating equipment in dormitory shelters, also canteen facilities at six public shelters.

Denton. — U.D.C. received approval of Ministry for garage for auxiliary ambulance depot at Alpha Mill site.—U.D.C. propose adaptation of second floor at Highways Depot for recreation-room for civil defence personnel. Plans by J. B. Cooke, S.

Gateshead. — T.C. to strengthen shelters and instal bunks, at £6,000.—T.C. received permission to instal static water basins at Windmill-av., at £500, and St. James'-rd., at £430.—Contract for provision of connecting corridor from nurses' home to air raid shelters at Mental Hospital has been placed with R. Carse and Son, Amble, at £95.

Hinckley. — U.D.C. approved: Additional shelter, for Burbage Boot Co.; fire guard shelter, for L. and A. Freeman.

Lancashire. — County Mental Hospital Board propose static water supply basins and installation of fire-fighting appliances at Lancaster Mental hospital, at £3.240.

Malton. — U.D.C. placed contract with L. T. Oldfield and Sons, Wharncliff, Welham-rd., Norton, for 21 public shelters for 761 persons, at £1,880, and for adaptation of premises for refuge-rooms and erection of blast walls on p.c. basis.

Middlesbrough.—Corporation Emergency Committee approved strengthening 112 public surface shelters, at £21,000.

Morley. — T.C. to adapt Highways Dept. Depot at Ardsley for fire-watchers.

Newcastle-on-Tyne. — G. G. Carr, 97, Bk. New Bridge-st., Newcastle-on-Tyne, has secured contract, at £117, for alterations to first-aid posts and cleansing station, Northumberland Baths.

Newcastle-on-Tyne.—City Council accepted tender of H. Kindred, Rosevale, Sunniside, Whickham, Durham, for cleansing station at Bentinck-rd.

Newcastle-under-Lyme. — T.C. to adapt buildings for public basement shelters.—T.C. propose public cleansing station at Froghall. Plans by A. Cotton, B.S.

Newton-le-Willows. — U.D.C. propose strengthening existing communal and public shelters.

Northumberland. — Contract for shelters and protection at East and West Whorlton schools has been placed with E. Jeffcock, Ltd., Newburn-on-Tyne.

Northumberland.—C.C. to strengthen shelters at Whitley Bay and Monkseaton. Plans by A. A. Cheyne, County S.

Rugby.—R.D.C. propose installing electric lighting and service connections to existing shelters at Long Lawford, Dunchurch and Wolston.

Salford.—T.C. propose: Canteens for shelters with accommodation for more than 200 persons; protection of Ladywell sanatorium and isolation hospital, at £706.

Silsden. — National Fire Service propose adaptation of rooms at fire station for sleeping accommodation for personnel.

Stoke-on-Trent. — T.C. propose protective works at 17 additional public shelters.

Wakefield.—T.C. propose installing 12,000 bunks in Anderson shelters.

Worcestershire.—H. Rowe and Son, Acting County Architects, 38, Foregate-st., Worcester, prepared plans for first-aid post and decontamination station at Stourbridge, for County War Emergency Committee.

SCOTLAND.

Edinburgh.—Corporation to proceed with erection of additional shelters and to strengthen existing shelters.

Glasgow.—Plans prepared for shelters at Patrick-st., architect being T. Somers, Municipal Buildings.

Glasgow.—Plans in hand for shelters for a municipal school, the architect being John MacNab, 129, Bath-St., Blythswood, Glasgow.

Kennoway (Fifeshire).—Plans in hand for shelters at the Public School. George Sandilands, County Architect.

Kirkcaldy.—Plans in hand for shelters for the Fife trades school.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. The dates at the head of paragraphs are those for the submission of tenders: a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING.

DECEMBER 23.

Cardigan T.C.—Cooling room and hide and skin room at public slaughter-house. B. S.

DECEMBER 24.

Amesbury R.D.C.—Extension of water pumping station. C. Laidman, S.

DECEMBER 29.

Bedfordshire Standing Joint Emergency Committee.—County Architectural Dept. Shire Hall, Bedford. Dep. £1 1s.

Deptford T.C.—Four public shelters. B. E. and S.

Twickenham. — Adaptation of 64, Broadst., Teddington, as British Restaurant. B. E.

DECEMBER 31.

Dublin Commissioners of Public Works.—Additions and alterations to 44, Upper O'Connell-st. G. P. Fagan, secretary, Office of Public Works, Dublin. Dep. £1.

JANUARY 2.

Smethwick C.B.—Cleansing station, Rolfe-st. B. E. Dep. £5 5s. (Last day for applications, December 15.)

JANUARY 5.

***Brentford and Chiswick T.C.**—Brick surface shelters. L. A. Cooper, B. E. and S. Dep. £5 5s.

NO DATE.

Edinburgh T.C. — Construction and strengthening of shelters. City E.

PAINTING, ELECTRIC LIGHTING, HEATING, &c.

DECEMBER 29.

Middlesbrough T.C.—Electrical installations in trenches and installation of electric pumps. H. Haigh, B. E. E. Dep. £2 2s.

ROAD, SEWERAGE AND WATER WORKS.

DECEMBER 30.

Merton and Morden U.D.C.—Ten water tanks. S., Council Offices, Kingston-rd., Merton, S.W.19. Dep. £1.

JANUARY 3.

Ilford T.C.—Reinforced concrete water supply basin. L. E. J. Reynolds., M.C., M.Inst.C.E., B. E. and S. Dep. £2 2s.

JANUARY 12.

Hartley Wintney R.D.C.—Extensions to sewage works and pumping station. Howard Humphreys and Sons, 7, Eldon-sq., Reading. Dep. £3 3s.

NO DATE.

Louth Drainage Board.—(a) Construction of large sea sluices: (b) dredging and draining of a tidal creek; about a mile long; (c) reorganisation of internal drains. R. B. Grantham, Son and Farran, 1, Prince's-st, Doncaster.

FEDERATED EMPLOYERS' INSURANCE ASSOCIATION LTD. ESTABLISHED 1904

The Leading Office for

Contract Guarantee Bonds

ALSO

FIRE

WORKMEN'S COMPENSATION

PUBLIC LIABILITY

MOTOR

ETC. ETC.

Head Office:

8 KING STREET, MANCHESTER, 2

London Office:

23, Lawrence Lane, Cheapside, London, E.C.2

PUBLIC APPOINTMENTS.

DECEMBER 24.

Dorset C.C. — Maintenance Engineer. Clerk, County Council, Dorchester.

DECEMBER 27.

***West Ham C.B.**—Technical Assistant B. S.

DECEMBER 29.

***Hull T.C.**—Two Temporary Architectural Assistants. A. Rankine, A.R.I.B.A., City Architect.

Willesden T.C.—Deputy Borough Engineer and Surveyor. W. T. Pirie, Town Clerk.

DECEMBER 31.

***Stepney B.C.**—Temporary Building Works Assistant. J. E. Arnold James, T. C.

JANUARY 3.

***Chadderton U.D.C.** — Architectural Assistant. J. Schofield, Clerk of the Council.

NEWS ITEMS

Sugar Soap and Water Glass.

Messrs. J. Manger and Son, Ltd., announce that, in spite of very restricted allocations of materials, they have kept the price of their sugar soap to the user at around the pre-war cost for over two years, but now increasing expenses, including the high cost of the limited cartons now available, compel them to charge 6d. for the 1-lb. carton.

We have received from the firm a tin of their water glass (silicate of soda), which has many uses in connection with building. For example, it can be used for waterproofing cement and damp walls, etc.; concrete or cement may be made dustless, and resistant to acids, oils, etc., by the same treatment; it is an excellent adhesive, neat or watered down to about half strength, and will stick to metal, glass, etc. Full particulars of these and other uses are given on the tin.

Building Industry's £1,000,000 Savings Drive.

Messrs. J. Laing and Son, Ltd., are aiming at raising £50,000 in War Savings in the next four months from among their employees for the purchase of three tanks—two heavies (Churchills) and one cruiser (Crusader)—as part of the Building and Civil Engineering Industries' drive to raise £1,000,000, the cost of 100 tanks. Individual "targets" have been fixed for each job, and in one area two large contracts are combining to raise the cost of one £10,000 tank, competing at the same time for the honour of raising the larger sum.

Messrs. Woodhall, Duckham and Co., Ltd., have set themselves a target of £6,500, the cost of a light tank.

Placing of Municipal Contracts, Glasgow.

Steps to tighten up the system of placing municipal contracts are being taken by a special committee of Glasgow Corporation. The committee of nine members, representing all parties in the Corporation, are being presided over by ex-treasurer Ernest Greenhill. One of the features being examined is the position of members whose firms, organised as limited liability companies, offer to supply goods or service to the Corporation.

Mr. Greenhill states that the survey is being extended to cover the whole question of contracts and bulk purchases. It will be the committee's object to close up any avenue which might lead to irregularities, he says. Any loophole of which a dishonest-minded person might take advantage would be stopped.

British Plastics in War Time.

The British Plastics Federation, Ltd., state that "Information has been received from various leading industrialists in the United States of America indicating that propaganda is current there, probably from unfriendly sources, that the plastics industry and other trades in Great Britain are still producing unreasonable quantities of non-essential articles of the domestic and fancy goods types and, furthermore, are seeking to take advantage of the present situation by entering into competition with the U.S.A. in certain export markets. There is no truth whatever in this propaganda."

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st JUNE, 1941

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors]

	Crafts-men.	Lab-ourers.
Aberavon	1/10½	1/5½
Aberdare	1/10½	1/5½
Abergavenny	1/10½	1/5½
Abingdon	1/9	1/4½
Accrington	1/10½	1/5½
Aldeburgh	1/7	1/3
Aldershot	1/9	1/4½
Alfreton	1/10½	1/5½
Alnwick	1/10	1/5¼
Altrincham	1/10½	1/5¾
Amble	1/10	1/5¼
Amersham	1/9	1/4½
Ammanford	1/10½	1/5½
Andover	1/8½	1/4¼
Ardingly	1/8½	1/4¼
Arundel	1/8½	1/4¼
Ascot	1/8½	1/4¼
Ashby-de-la-Zouch	1/10½	1/5½
Ashford (Kent)	1/8½	1/4¼
Ashford (Middlesex)	1/10½	1/5½
Ashington	1/10	1/5¼
Ashtead	1/10½	1/5½
Ashton-under-Lyme	1/10½	1/5½
Aylesbury	1/8½	1/4¼
Aylsham	1/7½	1/3½
Bagshot	1/8½	1/4¼
Banbury	1/8½	1/4¼
Barnsley	1/10½	1/5½
Barnstaple	1/8½	1/4½
Barrow-in-Furness	1/10½	1/5½
Barry	1/10½	1/5½
Basingstoke	1/8½	1/4½
Bath	1/10	1/5¼
Batley	1/10½	1/5½
Beaconsfield	1/9	1/4½
Beccles	1/7	1/3
Bedford	1/10	1/5¼
Berkhamsted	1/8½	1/4½
Berwick	1/10	1/5¼
Beverley	1/10½	1/5¾
Bexhill-on-Sea	1/9	1/4½
Bideford	1/8½	1/4¼
Biggleswade	1/8½	1/4¼
Billericay	1/8	1/3½
Birchington	1/8½	1/4¼
Birkenhead	‡$2/0½	¶
Birmingham	†1/10½	1/5½
Bishop Auckland	1/10½	1/5¾
Bishop's Stortford	1/9½	1/5
Blackburn	1/10½	1/5½
Blackpool	1/10½	1/5½
Blyth	1/10½	1/5½
Bognor Regis	1/8½	1/4¼
Bolton	1/10½	1/5¾
Bournemouth	1/9½	1/5
Bracknell	1/8½	1/4½
Bradford	1/10½	1/5½
Bradford-on-Avon	1/7½	1/3½
Braintree	1/8½	1/4¼
Brentwood	1/10	1/5¼
Bridgwater	1/9	1/4½
Bridlington	1/10	1/5¼
Brighouse	1/10½	1/5½
Brighton	1/9½	1/5
Bristol	1/10½	1/5½
Broadstairs	1/8½	1/4½
Bromsgrove	1/10	1/5¼
Buckley	1/10½	1/5½
Bungay	1/6½	1/2½
Burnham-on-Crouch	1/7	1/3
Burnley	1/10½	1/5½
Burslem	1/10½	1/5½
Burton-on-Trent	1/10½	1/5½
Bury	1/10½	1/5½
Bury St. Edmunds	1/8	1/3½
Buxton	1/10	1/5¼
Byfleet	1/9	1/4½
Cambridge	1/10½	1/5½
Canterbury	1/8½	1/4½
Cardiff	1/10½	1/5½
Carlisle	1/10½	1/5½
Carnforth	1/10½	1/5½
Castleford	1/10½	1/5½
Caterham	1/10½	1/5½
Chard	1/7½	1/3½
Chatham	1/9½	1/5
Chelmsford	1/10	1/5¼
Cheltenham	1/9½	1/5
Chepstow	1/10	1/5¼
Chertsey	1/9½	1/5
Chester	1/10½	1/5½
Chesterfield	1/10½	1/5½
Chichester	1/8½	1/4½
Chorley	1/10½	1/5½
Cirencester	1/8	1/3½
Clacton	1/8½	1/4½
Cleveleys	1/10½	1/5½
Clitheroe	1/10½	1/5½
Cobham (Surrey)	1/9½	1/5
Colchester	1/10	1/5¼
Colwyn Bay	1/9½	1/5
Congleton	1/10	1/5¼
Coventry	1/10½	1/5½
Cranbrook	1/8½	1/4½
Cranleigh	1/8½	1/4½
Crawley	1/8½	1/4½
Crewe	1/10	1/5¼
Cromer	1/7½	1/3½
Crowborough	1/8½	1/4½
Cuckfield	1/8½	1/4½
Darlington	1/10½	1/5½
Darwen	1/10½	1/5½
Daventry	1/9	1/4½
Deal	1/8½	1/4½
Denbigh	1/9½	1/5
Derby	1/10½	1/5½
Devizes	1/7½	1/3½
Dewsbury	1/10½	1/5½
Didcot	1/8½	1/4½
Diss	1/7	1/3
Doncaster	1/10½	1/5½
Dorchester	1/8	1/3½
Dorking	1/9	1/4½
Dover	1/8½	1/4½
Dovercourt	1/8½	1/4½
Driffield	1/9	1/4½
Droitwich	1/10	1/5¼
Dudley	1/10½	1/5½
Dunstable	1/9	1/4½
Durham City	1/10½	1/5½
Eastbourne	1/9½	1/5
E. Glam. (Mon. Val.)	1/10½	1/5½
East Grinstead	1/8½	1/4½
Edenbridge	1/8½	1/4½
Ely	1/7½	1/3½
Epping	1/10½	1/5½
Exeter	1/10	1/5¼
Exmouth	1/9	1/4½
Fakenham	1/7½	1/3½
Falmouth	1/9	1/4½
Fareham	1/9½	1/5
Faversham	1/8½	1/4½
Felixstowe	1/9½	1/5
Filey	1/9	1/4½
Fleetwood	1/10½	1/5½
Flint	1/10½	1/5½
Folkestone	1/8½	1/4½
Frinton-on-Sea	1/8½	1/4½
Frome	1/7½	1/3½
Gainsborough	1/9½	1/5
Gateshead	1/10½	1/5½
Gillingham (Kent)	1/9½	1/5
Glossop	1/10½	1/5½
Gloucester	1/10	1/5¼
Godalming	1/8½	1/4½
Goole	1/10½	1/5½
Gosport	1/10	1/5¼
Grantham	1/9½	1/5
Gravesend	1/10	1/5¼
Great Yarmouth	1/8½	1/4½
Grimsby	1/10½	1/5½
Guildford	1/8½	1/4½
Guilsborough	1/9	1/4½
Halifax	1/10½	1/5½
Hanley	1/10½	1/5½
Harpenden	1/9½	1/5
Harrogate	1/10½	1/5½
Hartlepools	1/10½	1/5½
Harwich	1/8½	1/4½
Haslemere	1/8½	1/4½
Hastings	1/8½	1/4½
Hatfield	1/10	1/5¼
Haywards Heath	1/8½	1/4½
Hednesford	1/10	1/5¼
Hemel Hempstead	1/9½	1/5
Henley-on-Thames	1/8½	1/4½
Hereford	1/8½	1/4½
Herne Bay	1/8½	1/4½
Hertford	1/10	1/5¼
Heysham	1/10½	1/5½
Hitchin	1/9½	1/5
Hoddesdon	1/10	1/5¼
Holt (Norfolk)	1/7	1/3
Horley	1/8½	1/4½
Horsham	1/8½	1/4½
Horwich	1/10½	1/5½
Huddersfield	1/10½	1/5½
Hull	1/10½	1/5½
Hunstanton	1/7½	1/3½
Huntingdon	1/8	1/3½
Ilfracombe	1/8½	1/4
Ingatestone	1/9	1/4½
Ipswich	1/10	1/5¼
Isle of Thanet	1/8½	1/4½
Isle of Wight	1/8	1/3½
Keighley	1/10½	1/5½
Kenilworth	1/10½	1/5¾
Kettering	1/10½	1/5½
Kidderminster	1/10	1/5¼
King's Lynn	1/8½	1/4¼
Kirkham	1/10½	1/5½
Knowle	1/10	1/5¼
Lancaster	1/10½	1/5½
Leamington	1/10½	1/5¾
Leatherhead	1/9½	1/5
Leeds	1/10½	1/5½
Leicester	1/10½	1/5¾
Leighton Buzzard	1/7½	1/3½
Letchworth	1/9½	1/5
Lewes	1/8½	1/4½
Lichfield	1/9½	1/5
Lincoln	1/10½	1/5¾
Littlehampton	1/8½	1/4½
Liverpool	‡$2/0½	¶
Llandudno	1/9½	1/5
Llanelly	1/10½	1/5½
London—		
12m. radius	*2/0	1/6½
12-15 m. radius	*1/11½	1/6½
Long Eaton	1/10½	1/5¾
Longton	1/10½	1/5¾
Loughborough	1/10½	1/5½
Louth	1/9	1/4½
Lowestoft	1/8½	1/4½
Luton	1/10	1/5¼
Macclesfield	1/10	1/5½
Maidenhead	1/9½	1/5
Maidstone	1/9	1/4½
Malvern	1/9	1/4½
Manchester	1/10½	1/5½
Manningtree	1/7½	1/3½
Mansfield	1/10½	1/5½
March	1/7½	1/3½
Margate	1/8½	1/4½
Market Harborough	1/9½	1/5
Matlock	1/9	1/4½
Melton Constable	1/7	1/3
Melton Mowbray	1/9½	1/5
Merthyr	1/10½	1/5½
Middlesbrough	1/10½	1/5½
Middleton	1/10½	1/5¾
Middlewich	1/10	1/5¼
Milford Haven	1/9	1/4½
Morecambe	1/10½	1/5¾
Morley	1/10½	1/5½
Mundesley	1/7½	1/3½
Nantwich	1/10	1/5¼
Nelson	1/10½	1/5¾
Newark-on-Trent	1/10	1/5¼
Newbury	1/8½	1/4½
Newcastle-on-Tyne	1/10½	1/5¾
Newcastle-u.-Lyme	1/10½	1/5¾
New Forest	1/8½	1/4½
Newmarket	1/8½	1/4½
Newport, Mon.	1/10½	1/5¾
Newport Pagnell	1/8½	1/4½
Northampton	1/10½	1/5¾
Norwich	1/10½	1/5¾
Nottingham	1/10½	1/5¾
Nuneaton	1/10½	1/5¾
Oakham	1/9	1/4½
Oldham	1/10½	1/5¾
Ormskirk	1/10½	1/5¾
Oxford	1/10	1/5¼
Oxted	1/9	1/4½
Paignton	1/10	1/5½
Peterborough	1/10	1/5¾
Plymouth	1/10½	1/5¾
Pontefract	1/10½	1/5¾
Pontypridd	1/10½	1/5¾
Port Talbot	1/10½	1/5¾
Portsmouth	1/10	1/5¼
Preston	1/10½	1/5¾
Pulborough	1/8½	1/4½
Ramsgate	1/8½	1/4½
Reading	1/10	1/5¼
Redditch	1/10	1/5½
Redhill	1/9	1/4½
Ripon	1/9	1/4½
Rochdale	1/10½	1/5¾
Rochester	1/9½	1/5
Rugby	1/10½	1/5¾
St. Albans	1/10	1/5½
St. Helens	1/10½	1/5½
St. Neots	1/8	1/3½
Saffron Walden	1/7½	1/3½
Salisbury City	1/8	1/3½
Salisbury Plain	1/9½	1/5
Sawbridgeworth	1/9	1/4½
Saxmundham	1/7	1/3
Scarborough	1/10	1/5½
Scunthorpe	1/10½	1/5½
Selby	1/10½	1/5½
Sevenoaks	1/9	1/4½
Sheerness	1/8½	1/4½
Sheffield	1/10½	1/5½
Shipley	1/10½	1/5½
Shoeburyness	1/10	1/5¼
Shoreham	1/9½	1/5
Shrewsbury	1/10	1/5½
Sittingbourne	1/8½	1/4½
Skegness	1/9½	1/5
Sleaford	1/9	1/4½
Slough	1/9½	1/5
Southampton	1/10	1/5½
Southend-on-Sea	1/10	1/5½
Southport	1/10½	1/5½
South Shields	1/10½	1/5½
Spalding	1/8½	1/4½
Stafford	1/10	1/5½
Staines	1/9½	1/5
Stamford	1/9½	1/5
Stevenage	1/9½	1/5
Stockport	1/10½	1/5½
Stockton-on-Tees	1/10½	1/5½
Stoke-on-Trent	1/10½	1/5½
Stourbridge	1/10½	1/5½
Stourport	1/10	1/5½
Stowmarket	1/7½	1/3½
Stratford-on-Avon	1/9½	1/5
Stroud	1/9½	1/5
Sunderland	1/10½	1/5½
Sutton Coldfield	1/10½	1/5½
Swaffham	1/7	1/3
Swanage	1/8½	1/4½
Swansea	1/10½	1/5½
Swindon	1/9	1/4½
Tamworth	1/10	1/5½
Taunton	1/9	1/4½
Tenterden	1/8½	1/4½
Thames Haven	1/10½	1/5½
Thetford	1/8	1/3½
Thorpe Bay	1/10	1/5½
Todmorden	1/10½	1/5½
Tonbridge	1/9	1/4½
Torquay	1/10	1/5½
Totnes	1/8½	1/4½
Trowbridge	1/7½	1/3½
Truro	1/8	1/3½
Tunbridge Wells	1/9	1/4½
Uppingham	1/9	1/4½
Uttoxeter	1/9	1/4½
Wakefield	1/10½	1/5½
Walsall	1/10½	1/5½
Walsden	1/10½	1/5½
Walton-on-Naze	1/8½	1/4½
Ware	1/10	1/5½
Warminster	1/7½	1/3½
Warrington	1/10½	1/5½
Warwick	1/10½	1/5½
Wellington R.D.	1/10	1/5½
Welwyn	1/9½	1/5
Welwyn Gar. City	1/10½	1/5½
Wells (Norfolk)	1/7	1/3
West Bromwich	1/10½	1/5½
Westcliff-on-Sea	1/10	1/5½
Weston-super-Mare	1/9½	1/5
Weybridge	1/9½	1/5
Weymouth	1/8½	1/4½
Whitby	1/9½	1/5
Whitstable	1/8½	1/4½
Widnes	1/10½	1/5½
Wigan	1/10½	1/5½
Wigton	1/9	1/4½
Willington	1/10½	1/5½
Wilmslow	1/10½	1/5½
Winchester	1/9	1/4½
Windermere	1/9	1/4½
Windsor	1/9½	1/5
Wisbech	1/8	1/3½
Witham	1/8½	1/4½
Woking	1/9	1/4½
Wokingham	1/8½	1/4½
Wolverhampton	1/10½	1/5½
Woodbridge	1/8	1/3½
Worcester	1/10	1/5½
Workington	1/9	1/4½
Worksop	1/10	1/5½
Worthing	1/8½	1/4½
Wrexham	1/10	1/5½
Wroxham	1/8	1/3½
Wycombe	1/9½	1/5
Wymondham	1/7½	1 3½
Yeovil	1/9	1/4½
York	1/10½	1/5½

* Painters 1d. less than other Craftsmen. † Plus 2d. per working day. ‡ Plasterers 2/1.
¶ Tradesman's Labourers, 1/6½. Navvies and General Labourers, 1/6½.
§ Joiners, Plumbers, Bricklayers, Tilers and Masons receive 2/- per week or 4d. per day Tool Money.

NOTE.—Carpenters and Joiners in all Towns and Districts (other than Birkenhead and Liverpool) receive 2d. per day Tool Allowance.

For Building Trade Wages in Scotland, see page 564

PRICES CURRENT OF MATERIALS*

Note: Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry. The prices of soft woods are for cash on delivery. At present linseed oil and genuine spirits of turpentine can only be supplied in cans in small quantities.

BRICKS, &c.

The price for Stock Bricks has been altered to minimum price at works for full lorry loads. Sittingbourne district. A quotation for cartage should be obtained as the haulage question is difficult.

		£ s. d.
First Hard Stocks	per 1,000	4 5 6
Second Hard Stocks	„	3 18 6
Mild Stocks	„	3 5 6
Single Rough Stocks	„	2 19 6
Third Common Stocks	„	2 10 0

2½ in. Phorpres. A discount of 6d. 1,000 only monthly account.	King's Cross Station per 1,000 s. d.	To sites in W.C. District per 1,000 s. d.
Pressed	51 9	58 3
Keyed	53 9	60 3
Single Bullnose	71 9	78 3
Rustics	71 9	78 3
Whites	72 3	78 3

White Midhurst Best selected (delivered London site) £ 5 10 0
Best blue Pressed Staffs. (London Stns.) 10 2 0
Do. Bullnose (London Stns.) 10 12 0
Blue Wire Cuts (London Stns.) 8 19 6
Best Stourbridge Fire Brick (London Stns.) :—

£ s. d.		£ s. d.
2½ in. 10 0 0	3 in.	12 0 0

GLAZED BRICKS. (London Stns.)

Best White Ivory and Salt Glazed Stretcher 28 0 0	D'ble Str'tch'rs D'ble Headers	36 10 0 33 10 0	
Headers 27 10 0	One side&two ends Two sides&one end	37 10 0 38 10 0	
Quoins, Bullnose and 4½ in. Flats 34 10 0	Splays and Squints	36 0 0	

Second Quality, £2 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

PARTITION SLABS.

Delivered London Area.

"PHORPRES" HOLLOW PARTITION BLOCKS.

	s. d.		s. d.
2" per yd. sup.	2 3	3" per yd. sup.	2 9
2½" „ „	2 6	4" „ „	3 1

CLINKER CONCRETE.

2" per yd. sup.	1 9	3" per yd. sup.	2 6
2½" „ „	2 1	4" „ „	3 4

CRANHAM TERRA COTTA.

Size 12 x 9 x 2" per yd. super	2 6
Size 12 x 9 x 2½ „	2 9
Size 12 x 9 x 3" „ „	3 3
Size 12 x 9 x 4" „ „	3 7

Plus 2d. for smooth one side, and 4d. for smooth both sides.

Delivered: Free on site London area.

HEMPSTEAD—KEYED TWO SIDES.

12" x 9" x 2"	2 6	12" x 9" x 3"	3 0
12" x 9" x 2½"	2 9	12" x 9" x 4"	3 9

Per yard super d/d. Free on site, London.

SAND.

Thames Ballast	9 6	per yd. delivered 2 miles radius Paddington.
Pit Ballast	9 0	„ „
Pit Sand	11 6	„ „
Washed Sand	13 0	„ „
½ in. Shingle	10 0	„ „
¼ in. Broken Brick	15 6	„ „
Pan Breeze	9 6	„ „

CEMENT.

Best British Portland Cement. Standard Specification. delivered London Area. £ s. d.

6 ton loads and upwards site	per ton	2 9 6
1 ton to 6 tons site		2 12 6
Alongside Vauxhall in 80 ton lots		2 7 0
"Ferrocrete" Rapid Hardening Cement—		
6 ton loads and upwards site		2 15 6
1 ton to 6 tons site		2 18 6
Alongside Vauxhall in 80 ton lots		2 13 0

Stored in Reserved Bins at works. 1s. 6d. per ton extra.
"Aquacrete" Water Repellent, "Blue Circle" cement, 30s. per ton extra on ordinary "Blue Circle" prices.
"Colorcrete" Nos. 1 and 2. Coloured Rapid Hardening Portland Cement, in 6-ton lots .. 3 19 6
"Colorcrete" not rapid hardening, according to colour, from £7 to £15 10s. per ton.
"Snowcrete" White Portland Cement 10 5 0
"417" Cement (Ultra Rapid Hardening) Delivered site London Area in 6 ton lots and upwards ..... per ton 3 9 6
Plus packages at current prices.
Super Cement (Waterproof), *bags extra* 3 19 6

NOTE.—Paper bags will be charged at the rate of 7s. nett per ton. Jute sacks charged 1s. 9d. nett each and 1s. 6d. nett each allowed if returned to works within two weeks, in good condition.

Carriage will be paid by makers on returned empty jute sacks.

£ s. d.		£ s. d.
Roman cement 8 10 0	Keene's Cement, White	7 0 0
Parian Cement 7 0 0	„ „ Pink	6 10 0

Cementone Colours for cement according to tints per cwt. from £2 16s. 0d.

PLASTER.

£ s. d.		£ s. d.
Coarse, Pink 4 0 0	Sirapite, Coarse	4 5 6
„ White 4 7 6	„ Finish	4 13 6
Pioneer 4 5 0		

Above prices for 4-ton loads and over London Area.

Best Ground Blue		Grey Stone Lime	2 17 6
Lias Lime 3 7 6		Chalk Lime	2 17 6
Granite Chippings 1 15 0		Hair per cwt.	3 5 0

NOTE.—Sacks are charged 1s. 9d. each, and credited 1s. 6d. if returned in good condition within three months, carriage paid.

Stourbridge Fireclay in paper bags, £2 12s. 6d. in 6-ton lots at railway depot.

STONE.

BATH STONE.—Delivered in railway trucks at

	s. d.
Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	3 3½

BEER STONE—RANDOM BLOCK—

Free on rail at Seaton Station.. per ft cube	2 3
Delivered free on rail Nine Elms, S.R. „	3 1½

Selected approximate size one way, 1d. per cubic ft. extra, selected approximately three sizes or for special work, 3d. per cubic ft. extra.

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., ...per ft. cube	4 7
Do. do. delivered on road waggons as above stations .....per ft. cub.	4 7

White basebed, 3d. per ft. cube extra.
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. *average* and ½d. beyond 30 ft.

HOPTON-WOOD STONE—

F.O.R. Quarries, Wirksworth, Derbyshire, Random blocks from 10 ft. and over P.ft.cb.	13 2
Sawn two sides	26 11
Sawn three or four sides	31 11

YORK STONE, BLUE—*Robin Hood Quality*.

Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) .....per ft. super	5 6
6 in. rubbed two sides, ditto .... „	6 3
3 in. sawn two sides slabs (random sizes) ..... „	2 7
2 in. to 2½ in. sawn one side slabs (random sizes) (paving) ..... „	1 8½
1½ in. to 2 in. ditto ..... „	1 4½

HARD YORK—

Delivered at any Goods Station, London.	
Scrappled random blocks .....per ft. cube	6 10
6 in. sawn two sides landings to sizes (under 40 ft. super) .....per ft.super	5 7½
6 in. rubbed two sides, ditto .... „	6 9
4 in. sawn two sides slabs (random sizes) ..... „	3 5
3 in. ditto ditto ..... „	2 8
2 in. self-faced random flags.....per yd. super	8 9

CAST STONE.

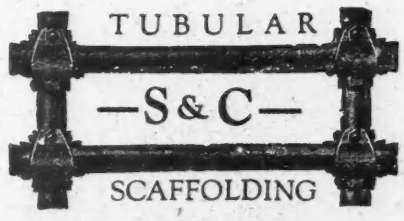
Delivered in London area in full van loads, per ft. cube: Plain, 7s. 6d. Moulded, 8s. 6d.
Small section cills and copings, 11s.

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality.	s. d.		Foot cube. £ s. d.
Dry English Wainscot Billets..	16 0	to	0 18 0
Dry Slavonian Billet Wainscot ..	17 0	to	1 0 0
Dry Cuba Mahogany logs 21	0	to	1 4 0
Square-edged Honduras Mahogany			0 16 6
Log Cut Honduras Mahogany			0 17 6
American Figured Oak			0 13 0
American Plain Oak			0 12 6
Jap. Figured Oak			0 13 0
Jap. Plain Oak			0 12 6
Teak			0 15 6
American Whitewood			0 12 6
African Whitewood			0 8 0
African Mahogany			0 11 0
Australian Walnut			0 19 0
Australian Silky Oak			0 12 6
Best Scotch glue	per cwt.		5 0 0
Liquid glue	per gallon		1 2 0

Having Secured the Contract— what about the Steel Scaffolding?



For the lowest Prices apply to the Oldest Firm in the Scaffolding Trade.

STEPHENS & CARTER LTD.

The British Steel Scaffolding Co.

731-761, HARROW RD., N.W.10.

Telephone No. Ladbroke 1191 (6 lines).

SOFT WOOD.

MERCHANTABLE BRITISH COLUMBIAN PINE

Minimum. £ s. d.	Maximum. £ s. d.
Scantlings in imported sizes,	
2 in. by 3 in. to 4 in. by 11 in. 43 10 0	53 0 0

PLANED BOARDS.

PRIME CLEAR BRITISH COLUMBIAN PINE.

	Per standard. £ s. d.
1 in. by 11 in. } 1 in. by 9 in. }	67 10 0

	Per square. s. d.
1 in. plain edge flooring	53 0
1¼ in. ditto	66 6
1 in. tongued and grooved	53 0
1¼ in. ditto	66 6

MATCHING.

	Per square. s. d.
¾ in.	37 6
¼ in.	42 0
1 in.	55 0

SLATES.

First quality slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	45 5 0	18 by 10	24 0 0
22 by 12	37 17 6	18 by 9	22 12 6
22 by 11	34 2 6	16 by 10	21 10 0
20 by 12	33 0 0	16 by 8	16 12 6
20 by 10	30 5 0		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons..... Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£5 6 6
Ditto hand-made ditto	6 7 6
Ornamental ditto	6 14 0
Hip and valley tiles (per dozen) { Hand-made	0 12 9
Hip and valley tiles (per dozen) { Machine-made	0 12 3

METALS.

JOISTS, GIRDERS, &C., TO LONDON STATION PER TON—

R.S. Joists, cut and fitted	£23 10 0
Plain Compound Girders	26 0 0
„ Stanchions	28 10 0
In Roof Work	33 10 0

NOTE.—These prices are for standard pieces and no special pieces of an awkward nature.

MILD STEEL ROUNDS.—To London Stations, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	23 0 0	⅛ in. to ½ in.	21 10 0
⅜ in.	22 0 0	⅝ in. to 2¾ in.	21 0 0

WROUGHT TUBES AND FITTINGS.

Deliveries from works.
Deliveries from London stock further 2½ % gross.

	Tubes. ½"/⅝" %	Tubulars. ½"/⅝" %	and 19/24 %	Flanges. ½"/2" %	2½"/6" %
Light weight	51½	—	47½	51	57½
Heavy weight	44	44	39½	41	49½
Galv.lightweight	40½	—	38½	39½	48½
Galv.heavyweight	31	31	29½	41	

Tubes and tubulars sizes ½"/¼" inclusive, charged extra of 5% less gross.
Fittings. Figs. 25/34 5% less gross discount.
Terms.—Nett cash end of month following date of invoice. Carriage paid on lots of £10 nett value and over.

C.I. HALF-ROUND GUTTERS—London Prices ex Works. per yd. in 6 ft. lengths.

	Gutters.	Nozzles.	Stop ends.
3 in.	1/5½	1/2½	4½d.
3½ in.	1/7	1/4	4½d.
4 in.	1/7	1/6	6½d.
4½ in.	1/8½	1/8½	7½d.
5 in.	2/0½	2/0	9d.

O.G. GUTTERS.

3 in.	1/10¾	1/7½	5d.
3½ in.	2/1½	1/7½	6½d.
4 in.	2/1½	1/8½	7½d.
4½ in.	2/2½	1/11½	8½d.
5 in.	2/8½	2/3	10½d.

RAIN WATER PIPES.

Per yd. in 6 fts.	Pipe	Bends. Stock angles.	Branches.
2 in.	2/2½	1/5½	2/2
2½ in.	2/3½	1/8½	2/7½
3 in.	2/8½	2/1½	3/2
3½ in.	3/2½	2/6½	3/7½
4 in.	3/8½	3/0½	4/5

NETT PRICES.

Tonnage allowance—4-ton lots, 5 per cent. 2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices, ex Stock.

Per yd. in 6 fts.	Pipe.	Bends.	Branches.
2 in.	3/9½	2/7½	3/2
2½ in.	4/5	2/10½	3/11½
3 in.	4/9	3/2	4/8½
3½ in.	4/10½	3/11½	5/5½
4 in.	5/3½	4/5	6/3½

L.C.C. COATED DRAIN PIPE.

	Pipe.	Bends.	Branches.
3 in. per yd. in 9 fts. cwt. qr. lbs.	5/5	6/3	9/11
4 in. 1 1 20	7/11	7/1	12/6
5 in. 1 2 22	9/7	12/9	19/3
6 in. 2 0 6	11/5	14/8	25/6

Gaskin, 75/- per cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information. Prices are subject to 2½ per cent. cash discount.

PRICES CURRENT OF MATERIALS—(contd.)

	Per ton basis in London. £ s. d.
IRON.—Staffordshire Crown, Merchant quality	18 7 6
IRON.—Staffordshire Marked Bars	19 7 6
Mild Steel Bars	19 15 0
Mild Steel Hoops	21 10 0
	Ex Merchant's Stock, per ton (two-ton lots).
Soft Steel Sheets, C.R. and C.A.—	
20 gauge	24 17 6
24 gauge	25 2 6
26 gauge	25 17 6
Galvanised Corrugated Sheets, 6 ft. to 9 ft.	
20 gauge	27 0 0
24 gauge	27 10 0
26 gauge	28 15 0
Galvanised Flat Sheets, C.R. and C.A.—	
20 gauge	28 10 0
24 gauge	29 0 0
26 gauge	30 5 0
	Per ton. £ s. d.
Cut Nails, 3 in. and up	28 10 0

ALL NETT.

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

PLUMBERS' BRASS WORK.

Delivered in London.
To pass Met. Water Board.

CRUTCH HEAD S.D. BIB COCKS FOR IRON. EASY CLEAN.

½ in. ¾ in.
37/- 58/6 per doz.

CHROMIUM PLATED TOILET S.D. BIB COCKS FOR IRON. EASY CLEAN.

½ in. ¾ in.
52/3 72/- per doz.

S.D. STOP COCKS FOR IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/- 59/- 97/- 228/- 324/- 540/- per doz.

S.D.S. COCKS WITH TWO UNIONS FOR LEAD.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
53/- 84/- 136/- 252/- 405/- 664/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
9/11 11/- 17/6 29/3 49/6 71/- per doz.

HEAVY CROYDON BALL VALVES. SCREW IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in.
45/- 73/- 120/- 210/- 297/- per doz.

CAPS AND SCREWS.

1½ in. 1¾ in. 2 in. 3 in. 3½ in. 4 in.
11/9 14/5 21/6 37/9 54/- 59/6 per doz.

BRASS SLEEVES.

1¼ in 2 in. 3 in. 3½ in. 4 in.
10/9 13/6 25/- 37/- 46/- per doz.

LEAD TRAPS WITH BRASS CLEANING SCREWS.

	1½ in.	1¼ in.	2 in.	3 in.	
8 lb. Lead P. ..	26/-	34/8	48/3	84/-	per doz.
8 lb. Lead S. ..	32/6	41/6	60/-	108/-	,,

SOLDER.—Plumbers, 1/5. Tinmen's, 1/8. Blow pipe, 1/10 per lb.

LEAD, &c.

(Delivered in London.)	Per ton. £ s. d.
LEAD.—Sheet, English, 4 lb. and up	35 10 0
Pipe in coils	35 0 0
Soil pipe	40 10 0
Compo pipe	42 5 0

NOTE.—Country delivery, 20/- per ton extra, lots under 3 cwt. 4/- per cwt. extra and over 3 cwt. and under 5 cwt., 2/6 per cwt. extra. Cut to sizes, 4/- per cwt. extra.

Old lead, ex London area, at Mills..... per ton } £18 0 0.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil (5 galls.) .. per gallon	0 5 5
Boiled Linseed Oil (5 galls.) .. ,,	0 5 8
Turpentine (5 galls.) .. .. ,,	0 8 9
Genuine Ground English White Lead, per cwt.	3 8 3
Genuine White Lead Paint, 14 lb. tins free, per cwt.	4 11 0
Genuine Red Lead. ,,	2 14 0
Linseed Oil Putty ,,	1 1 3
Size. XD quality ,, fkn.	0 4 3

Turpentine substitute can be obtained and prices vary according to quality from 3/3 gallon upwards.

	£ s. d.
SNOWCEM CEMENT PAINT ..... per cwt.	2 16 0
C.M.C. CAMOUFLAGE PAINT ..... ,,	2 16 0

VARNISHES, &c.

		Per gallon.
Oak Varnish	Outside	0 16 0
Fine do.	,,	0 18 0
Fine Copal	,,	1 0 0
Pale Copal	,,	1 2 0
Pale Opal Carriage	,,	1 6 0
Best do. do.	,,	1 14 0
Floor Varnish	Inside	1 0 0
Fine Pale Paper	,,	1 0 0
Fine Copal Cabinet	,,	1 4 0
Fine Copal Flatting	,,	1 2 0
Hard Drying Oak	,,	1 0 0
Fine Hard Drying Oak	,,	1 1 6
Fine Copal Varnish	,,	1 2 6
Pale do.	,,	1 14 0
Best do.	,,	1 4 6
Best Japan Gold Size	,,	1 14 6
Best Black Japan		0 12 0
Oak and Mahogany Stain (water)		0 14 0
Brunswick Black		0 9 6
Berlin Black		0 16 0
Knotting (patent)		0 17 0
French and Brush Polish		0 14 0
Liquid Dryers in Terebene		0 11 0
Cuirass Black Enamel		0 9 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

ORDINARY GLAZING QUALITY (O.Q.) AND SELECTED GLAZING QUALITY (S.Q.).

PER FOOT SUPER.

In sizes not exceeding 80 in. long or 48 in. wide or 110 united inches.

	O.Q.	S.Q.
18 oz. in 300 ft. cases	2½d.	2½d.
24 oz. ,, 200 ft. ,,	3½d.	4d.
26 oz. ,, 200 ft. ,,	3½d.	4½d.
32 oz. ,, 200 ft. ,,	5½d.	6½d.
24 oz. ,, 300 ft. ,,	3½d.	3½d.
26 oz. ,, 300 ft. ,,	3½d.	4½d.
32 oz. ,, 300 ft. ,,	5½d.	6½d.
24 oz. Obscured Sheet		6½d.
Fluted, 21 oz.		9d.
Enamelled, 18 oz.		5½d.
,, 24 oz.		6½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE AND FIGURED CATHEDRAL, ETC., IN CUT SIZES.

Over 500 ft. super of all kinds.

	Per ft.
Rolled plate, ¼ in.	5½d.
Rough cast double rolled, ⅜ in.	6½d.
Rough cast double rolled, ½ in.	6½d.
Figured rolled, and Cathedral, white	6½d.
Figured rolled and Cathedral, tinted	9½d.
Rolled Sheet	6d.
Reeded, Broad Reeded, Cross Reeded and Chevron Reeded, ¼ in. thick	0 10½

Rolled plate is the same price as rough cast double rolled.

	Per ft. s. d.
Wire Rolled, ¼ in. thick	0 9½
Wired Cast, ¼ in. thick	0 9½
Georgian Wired Cast	0 10
"Calorex" Sheet, 21 oz.	2 6
,, ,, 32 oz.	4 0
,, Cast, ¼ in. thick	0 10
,, ,, ⅜ in. thick	1 0
,, ,, ½ in. thick	1 2
Non Actinic Glass, ¼ in. thick	0 9½
,, ,, ⅜ in. thick	1 0
,, ,, ½ in. thick	1 2

"VITA" GLASS.

	Per ft. s. d.
"Vita" Plate Glass, about ⅛ in. thick	
To 7 ft. super	5 0
Over 7 ft. super	7 6
"Vita" Sheet Glass, about 18/20 oz.	2 0
Cathedral "Vita" Glass :	
¼ in. thickness	2 0
⅜ in. ,,	3 0
¼ in. Georgian Wired "Vita" Glass	3 6

GLASS BRICKS.

	s. d.	
P.B. 1—8 in. × 4¼ in. × 3¼ in.	2 3	each nett
P.B. 2—5¼ in. × 5¼ in. × 3¼ in.	2 0	,,
P.B. 3—7¼ in. × 7¼ in. × 3¼ in.	3 0	,,
P.B.32—7¼ in. × 7¼ in. × 3¼ in.	3 0	,,
Radiused Corner Bricks to match up with—		
P.B. 2	3 9	each nett
P.B. 3	5 0	,,
P.B.32	5 0	,,

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. from October 1. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A1	A2	A3	B	B1
Craftsmen	1/11½	1/11	1/10½	1/10	1/9½	1/9
Labourers	1/6	1/5¾	1/5¼	1/5	1/4½	1/4¼

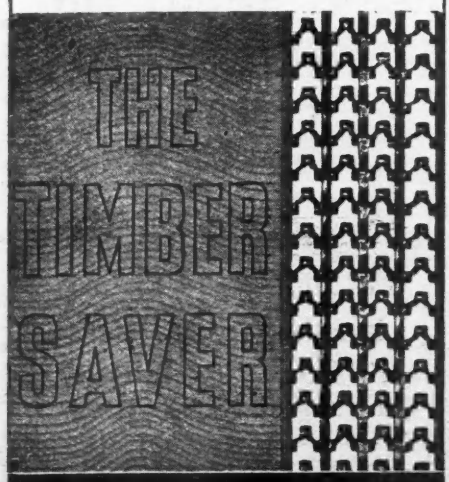
Aberdeen	A	Dumfriesshire	A2	Inverness	*	Perthshire	A2
Ayrshire	A	Dundee	A	Inverurie	A1	Peterhead	A1
Banff	B	Dunoon	A	Kincardineshire	A2	Renfrewshire	A
Berwickshire	A2	East Fife	A	Kinross-shire	A	Rothesay	A
Bridge of Allan	A	East Lothian	A	Lanarkshire	A	Roxburghshire	A2
Broughty Ferry	A	Edinburgh	A	Midlothian	A	St. Andrews	A
Clackmannanshire	A	Fifeshire	A	Monifieth	A	Selkirkshire	A2
Doune	A	Forfarshire	A2	Moray and Nairn	B	Stewartry	A2
Dunblane	A	Glasgow	A	Newport	A	Stirlingshire	A
Dumbartonshire	A	Greenock	A	Peeblesshire	A2	Stornoway	A2
Dumfries	A1	Hamilton	A	Perth	A	Tayport	A
						West Lothian	A

* This town has its own rates : Masons, 1/8½ ; Carpenters, 1/8½ ; Slaters, 1/8½ ; Plumbers, 1/9 ; Plasterers, 1/9½ but 1/10 is paid owing to the scarcity at present ; Painters, 1/8½ and Labourers, 1/4

The information given in this table is copyright. Rates of wages in England and Wales are given on page 562.

HY-RIB
COMBINED CENTERING AND REINFORCEMENT

FOR SPEEDY, SIMPLE AND ECONOMICAL CONSTRUCTION OF
CONCRETE FLOORS • ROOFS • WALLS
PARTITIONS • TANKS • CEILINGS
RESERVOIRS • TUNNELS • SILOS • ETC.



HY-RIB SALES
6 · COLLINGHAM GARDENS · EARLS COURT · LONDON · S.W.5
Telephone: FROBISHER 8141

M 4.487

THE SCOTTISH BUILDER

NEW BUILDING

GLASGOW. — BUILDING. — Corporation Police Committee propose to provide riding-school and stables for Glasgow police, at £10,000.

YOUNG MALE LABOURERS

WAGE RATES.

THE National Joint Council for the Building Industry have issued a memorandum (dated November 10) of a war-time agreement on the employment of young male labourers in the building industry during the period of the war.

The parties to the National Joint Council for the Building Industry having come to the conclusion that it is desirable that the conditions under which young male labourers shall be employed in the building industry in war-time shall be regulated upon a national basis, it has therefore been agreed and decided by the National Joint Council for the Building Industry (under the powers of Clause 5 (e) of its constitution) to add to the War-Time Emergency Wage Agreement of November 22. 1939, the following provisions :

1. The basic rate of wages for young male labourers employed in the building industry shall be :

At 15 years of age, 40 per cent. of the labourers' current rate.
At 16 years of age, 50 per cent. of the labourers' current rate.
At 17 years of age, 75 per cent. of the labourers' current rate.
At 18 years of age, 100 per cent. of the labourers' current rate.

2. The Rules, Regulations and Working Rules of the National Joint Council for the Building Industry (including extra payments prescribed under National Working Rule 3 and any nationally approved regional or local variations) shall apply to young male labourers.

The above war-time rule was promulgated to take effect from November 17, 1941.

CURRENT AND PROPOSED NEW BUILDINGS

Anglesey. — E.C. propose canteens at all council and secondary schools.

Bangor. — Caernarvonshire C.C. propose adaptation of Plas Gwyn for nurses' home, for County Hospital.

Barnsley. — E.C. propose extensions to dining-room, internal painting and decoration at Grammar school, Huddersfield-rd.

Batley.—E.C. propose external and interior painting and decorating of schools.

Bentley (Yorks).—Barber, Walker and Co., Ltd., Eastwood Colliery, Notts, propose extension of colliery workings.

Birmingham.—E.C. approved schemes for canteens to 12 schools.

Bury.—Watch Committee propose conversion of premises for police station.—E.C. propose conversion of Moorgate domestic science centre as cooking depot.

Caernarvon.—T.C. propose: Adaptation of Ebenezer school as British Restaurant; conversion of Plas Trefian into sick bay hostel.

Chester. — R.D.C. propose adaptation of premises for communal feeding centres.

Clay Cross.—U.D.C. received approval of Ministry of Food for structural alterations to premises in Market-st. for conversion into British Restaurant, at £425.

Cowling. — Parochial Council of Parish Church propose rebuilding church school.

Criccieth. — U.D.C. to adapt premises for hostel sick bay.

Denholme. — U.D.C. acquired "Main Villa" for conversion into Council Chamber and offices.

Denton.—E.C. propose community feeding centres at two schools.

Durham. — Cackett, Burns Dick and McKellar, Ellison-pl., Newcastle-on-Tyne, are architects for a hostel.

Garstang.—R.D.C. propose road improvements and maintenance, at £18,600.

Gateshead. — M.H. approved scheme for war-time nursery, at £405, for T.C.

Grantham.—Canteen proposed at Springgdns. Plans by Blackwell and Storry, Gold-st., Kettering.

Harrogate. — Catering Committee of T.C. submitted scheme to Ministry of Food for British Restaurant.

Hendon.—T.C. to seek Ministry of Food approval for erection of two Nissen huts for British Restaurants.—T.C. to adapt four shops for use as British Restaurant.

Heywood.—T.C. propose conversion of premises for British Restaurant.

Hinckley. — U.D.C. acquired premises at Earl Shilton for British Restaurant.

Hinckley. — U.D.C. approved: Packing-case and box store, for Harvey, Harvey and Co., Ltd.; reconditioning of cottages, for T. S. Lord and Sons.

Hull. — E.C. to provide canteens at all schools.

Ince.—U.D.C. propose conversion of premises for British Restaurant. Plans by P. Fairclough, S.

Kettering. — T.C. approved: Alterations, Newland-st., Co-operative and Labour Institute Building Committee; additions, Upson's, Ltd., Victoria-rd.; store-house, for Greenlees and Sons (Easiphit), Ltd.—T.C. to erect day nursery.

Lancashire.—E.C. propose: Feeding centre at Haverthwaite, The Leven Valley school; extensions of Worsley school canteen, at £986; alterations to "Rosebank," Huyton.

Lancashire. — P.A.C. propose additional ward at maternity ward of Lake hospital, Ashton-under-Lyne.

Liverpool.—E.C. propose reinforced concrete roof at sub-station, at £3,000.

Loughborough.—T.C. propose conversion of premises for communal feeding centre.

Ludlow. — R.D.C. propose to adapt the Assembly Rooms, Chaddesley Corbett, for British Restaurant.

Manchester.—T.C. approved: Canteen, for Hugon and Co., Ltd.; extensions, for B. and S. Massey, Ltd.; additions, H. S. Fairhurst and Son (FF.), architects, 55, Brown-st.; factory, G. Westcott and Son (F.), architects, 31, Byrom-st., Deansgate; rebuilding copper-house to brewery, Cornbrook, R. G. Ryman, architect, "Hillcrest," Carshalton Beeches, Surrey; rebuilding factory, J. G. McBeath, architect, 2, Montague-rd., Sale, Ches; conversion of premises into p.-h., for Wilson's Brewery Co., Ltd., R. S. Litherland (L.), architect, 10, High-st., Burton-on-Trent.

Market Drayton.—U.D.C. propose conversion of premises for public conveniences.

Newcastle-on-Tyne.—Marshall, Tweedy and Bourn, Grainger House, Blackett-st., Newcastle-on-Tyne, prepared plans for rebuilding garage, for Moults, Ltd.; Hetherington and Wilson, County-chams., Westgate-rd., Newcastle-on-Tyne, are architects for joiners' shop and boiler-house.

Newcastle-on-Tyne.—City Council to convert stores for offices at central library. Plans by J. F. C. Solomon, City Estate and Property S.

Newcastle-under-Lyme. — T.C. propose adaptation of premises as hostel.

Newcastle-under-Lyme. — T.C. approved: Additions to "Bradwell House" Inn, Longbridge Hayes, for Ind, Coope and Allsopp, Ltd., Station-st. Brewery, Burton-on-Trent.

Normanton.—Briggs Collieries, Ltd., Whitwood, propose pithead canteens.

Northumberland. — E.C. to set up school canteens. Plans by W. W. Tasker, County Architect, County Offices, Morpeth.

Northwich.—R.D.C. approved: Bakehouse and store, Barnton, for L. A. Leaver.

Ripponden.—U.D.C. propose conversion of premises for British Restaurant. Plans by J. Sharples, E.

Rotherham. — Hempel Bros. (Bingley), Ltd., acquired premises for extensions.—T.C. approved: Extensions, for C. F. Booth, 12, West View; canteen, for J. J. Habershon, Ltd.

Rothbury.—R.D.C. to carry out permanent repairs to property at Debdon Whitefield. Plans by S., in conjunction with Hetherington and Wilson, County-chbrs., Westgate-rd., Newcastle-on-Tyne.

Rugeley. — U.D.C. propose conversion of parish hall as day nursery.

Salford. — T.C. propose reconstruction of corridors at Hope Hospital; alterations to central fire station and electrical work.—E.C. propose reroofing Tootal-rd. school. Weaste, at £966 (Cruickshank and Seward (F.), architects, 16, Princess-st., Manchester).

Salford.—T.C. seeking to borrow £3,000 for additional repairs to property.—Day nurseries proposed on various sites.—Old People's Homes to be adapted as annexe to hospital.—E.C. to carry out repairs to Seedley school and adapt for youth centre.—T.C. approved: Additions, for A. Cassel and Sons, Ltd.; additions, Frank-st., for W. D. Neild; additions, West Union-st., for S. Horwich and Co., Ltd.

Seaton Valley.—U.D.C. to set up British Restaurants at Seghill and High Pit. Plans by T. W. Burgess, S.

Sedgley.—U.D.C. approved: Canteen, for Earl of Dudley's Baggeridge Colliery, Ltd., Round Oak, Brierley Hill.

Sheffield. — T.C. propose alterations to kitchen at Fir Vale House Institution and decorations, at £500.

Sheffield. — T.C. to erect hutments on various sites for workers' canteens.—T.C. approved: Additions, Brown, Bayley's Works, Ltd.

Shrewsbury.—E.C. propose day nursery at Ditherington infants' school.

Skipton.—U.D.C. propose canteens for all schools.

South Shields.—Hetherington and Wilson, County-chbrs., Westgate-rd., Newcastle-on-Tyne, prepared plans for reconditioning "Tram Hotel," for W. B. Reid and Co., Ltd.

Southwell.—R.D.C. propose conversion of premises at Blidworth for British Restaurant.

Spenborough. — U.D.C. approved plans: Additions, for F. Senior, Ltd.; additions, for T. Holdsworth and Son.

Stafford. — T.C. propose day nursery at Crooked Bridge-rd.

Staveley. — U.D.C. propose canteens at elementary schools. Plans by J. B. McGaw, S.

Stockport. — E.C. propose extension of scheme for feeding of schoolchildren.

Stockton-on-Tees. — T.C. to adapt Bowesfield Hall as British Restaurant, at £305.

Stoke-on-Trent. — E.C. to erect pre-fabricated huts for 240 children.—Berry Hill Collieries, Ltd., propose canteen to pithead.

Sunderland.—R.D.C. to extend community feeding centre at Ryhope. Plans by C. Emmerson, S.

Wakefield.—T.C. approved: Additions to office block, for S. Raines; additions to store, Balne-la., for E. Lockey.

Wallsend.—Plans approved for garage, for Harry Stockhill, 9, Lodge-terr. — R. Hood Haggie and Son, Ltd., to erect canteen and warehouse.

Warrington. — T.C. has received approval of M.H. to the expenditure of £1,727 for erection of a nursery and for the work to commence as soon as possible.

Washington (Co. Durham).—U.D.C. to extend British Restaurant.

Wigan. — T.C. propose emergency communal feeding at 17 centres in nine areas. Plans by L. Lyons, B.E.

Wigan.—T.C. received approval of M.H. for garage for police vehicles, at £1,455.

Wigston.—Local branch of British Legion propose Legion hall.

Willenhall.—Broadway Colliery Co., Ltd., propose extension of colliery workings.

DON'T TENDER UNSUCCESSFULLY

SECURE CONTRACTS WITH

THE STEEL SCAFFOLDING CO., LTD.

23, OATLANDS DRIVE, WEYBRIDGE, SURREY.

'Phone: Walton-on-Thames 614 and 615.

TENDERS

The Editor welcomes authentic information for this feature from architects, surveyors or contractors. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Tuesday morning.

Tenders for A.R.P. work will be found under "A.R.P. Schemes."

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modification.*
¶ Denotes *accepted by H.M. Government departments.*

Bangor (Caernarvonshire).—Two beds of retorts, etc. J. R. Wood, Gas Manager: *Gibbons Bros., Ltd., Dudley, £4,823.

Droitwich.—British Restaurant, for T.C. R. E. Hulse, B.S.: *G. Harrison & Son, Tower Hill, Droitwich.

Hexham. — Canteen at Hexham Grammar school: *M. Hogarth & Son, Corbridge-on-Tyne, £600.

Hinckley. — Heavy equipment for British Restaurant, for U.D.C. J. S. Featherston, S.: *Young, Austen and Young, Ltd., Burton-st., Leicester, £945.

Hinckley.—Reconditioning cottages, Freeman's-la., Burbage: *T. S. Lord & Son, Lutterworth-rd., Burbage, Hinckley.

Lancashire.—Works, for C.C.—Alterations to premises for remand home: *E. Tonge & Sons, Ltd., Station-rd., Swinton, Manchester, £679; reinstatement of cookery centre, Litherland Lander-rd. school: *W. A. Gale, Ltd., Linacre-la., Bootle, Liverpool 20 (wages and material basis); kitchen equipment at three schools: *Universal Kitchen Equipment Co., 8, Caunce-st., Blackpool, £161; removal of gallery at Heywood Grammar school: *Parker & Calvert, Ltd., 28, Pine-st., Heywood; painting gymnasium at Greenfield Massage Centre: *Haslingden Industrial Co-operative Society, Ltd., Bank-st., Haslingden.

¶London (War Dept.).—Following are contracts placed by War Department at December 6:—

Yorks: Building work, J. Alma Jordan, Tranby Croft, Tranby-la., Anlaby, Hull.

Yorks: Miscellaneous work, W. A. Moore & Son, Springhill-rd., Scarborough.

Yorks: Hutting (erection), F. P. Leach & Sons, Ltd., 1, Waterside, Girlington, Bradford.

Lincs : Hutting (erection), W. & J. Simons, Ltd., Gordon-rd., West Bridgford, nr. Nottingham.

Derbyshire : Miscellaneous work, Henry Hope & Sons, Ltd., Holford Works, Smethwick, Birmingham.

Leics : Building work, Sherriff & Co., Ltd., Gypsy-la. Works, Ireton, Leicester; G. Calverley & Sons, 1, Northampton-st., Leicester.

Suffolk : Miscellaneous works, V. G. Selwood & Co., 86, Broomfield-rd., Chelmsford, Essex.

Essex : Miscellaneous work, Hubert C. Leach, Southfield-rd., Waltham Cross, Herts.

Middx : Building work, W. Pye, 299-303, Mitcham-rd., Tooting Junction, S.W.17.

Kent : Miscellaneous works, Ward Barton & Co., Ltd., Tankerton Circus, Whitstable, Kent.

Hampshire : Hutting (erection), Haynes & Son, Ltd., Ivy-st., Salisbury.

Wilts : Miscellaneous works, Bryant & Trowbridge, Ltd., Clarendon-rd., Christchurch, Hampshire.

Co. Down : Hutting (erection), D. McCune & Son, Arbour-st., Belfast.

Middlesbrough. — Works, for T.C.—Repairs to houses : *G. T. Howd, *Pilkington & Co., *W. Broomfield, *J. Myers, *A. Robinson; work in connection with establishment of auxiliary hospital. C. Gorman, B.E. : *A. Robinson, Ltd., Middlesbrough, £440.

Newcastle-on-Tyne. — Canteen, first-aid post and lavatories : *J. C. Clarkson, 28, Benwell Grange-av., Newcastle-on-Tyne.

Newcastle-on-Tyne.—Works, for City Council.—Drain at Block "D" at General hospital : *Wilkinson Bros., 174, Addycombeter., Newcastle-on-Tyne, £254; alterations to drainage system at Block "B," Elswick Grange Institution : *H. M. McLaren and Partners, Newcastle, £119; reinstatement of yard surface at Elswick Grange : *C. S. Bunch & Sons, Benfield-rd., Newcastle, £177.

Newcastle-on-Tyne.—Repairs to premises, for Tyneside Butchers, Ltd. : *Wilkinson Bros., Newcastle-on-Tyne, £225.

Sunderland.—Supply of trackwork required, for T.C. C. A. Hopkins, Transport Manager : *Titan Trackwork Co., Ltd., Sheffield, £475.

Warrington.—Erection and completion of day and night nursery, Richmond-av., for T.C. : *D. Cooper, Ltd., Clarence-st., Warrington.

Westminster.—For ridding 12 bombed sites of rats, for City Council : *Wm. Dalton & Sons, 3, St. James's-st., S.E.1, £400.

Whitby.—Clearance of sites, for U.D.C. : *H. Dunn, Bishop Auckland, Co. Durham, £680.

Wolverhampton.—Works, for T.C.—Construction of footpaths : *W. H. Rogers, Ltd., Willenhall, £1,456; widening and reconstructing Warstones-rd. : *Greenly Bros., Sedgeley-rd., Penn, Wolverhampton, £3,954.

Worcs.—Drainage work at Waseley Hills school, Rubery, for E.C. H. Rowe & Son, Acting County Architects, 38, Foregate-st., Worcester : *W. R. Mansell, 14, Broad-st., Bromsgrove, £279 1s.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan and Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies Registry.

ROWE BROS. (ST JOHN'S WOOD), LTD. (370,834). Regd. November 22. Furnival House, 14-18, High Holborn, W.C.1. Builders, etc. Nom. cap. £100. Dir. : L. Nedas, 117, Canfield-gds., N.W.6.

ARCHITECTS' CLASSIFILE, LTD. (370,721). Regd. November 19. 5, Great Winchester-st., E.C.2. To instal and maintain cabinets for displaying and classifying advertising matter, catalogues, etc., connected with the building trades. Nom. cap. £2,000. Dirs. : H. Marshall, Fairways, Green-ln., Northwood, Mdx., and A. P. G. Walters.

HAYDONS (WESTERN), LTD. (370,766). Regd. November 20. 27, Clement's-ln., E.C.4. Woodworkers, timber merchants, etc. Nom. cap. £100.

CRITERION CONSTRUCTION CO., LTD. (370,755). Regd. November 20. 66, Park-rd., N.W.1. Builders, etc. Nom. cap., £7,000. Dirs. : C. J. Ricketts, 5, Downe-mans., Gondar-gdns., N.W.6. and J. G. L. Hubbard.

VICTORIA CONSTRUCTION AND ENGINEERING CO., LTD. (370,904.) Regd. November 26. 119, Victoria-street, S.W.1. To take over a business carried on at 5, Albany-rd., N.15, as "B. Spring and Co." Nom. cap. £100. Dirs. : B. H. Spring, 5, Albany-rd., N.15; L. Theodore and F. Harris.

EDWARD W. SMITH (ROMFORD), LTD. (370,882). Registered November 26. Builders, decorators, etc. Nom. cap. £1,000. Dirs. : E. W. Smith, 108, Masheters-walk, Romford, and S. W. Cubberley, "Santa Monica," Buckhurst Hill, Essex.

"UNITE for STRENGTH"

MASTER BUILDERS

YOU CAN ENROL NOW FOR 1942.

SUBSCRIPTION £3.3.0 P.A.

FEDERATION OF GREATER LONDON MASTER BUILDERS

MEMBERSHIP OVER 700.

WRITE OR 'PHONE:
SECRETARIES,
23, COMPTON TERRACE, UPPER STREET,
CAN 2041/2. N.1.

Now Published — Sixth Edition
Revised throughout, and greatly enlarged, superseding all previous issues.

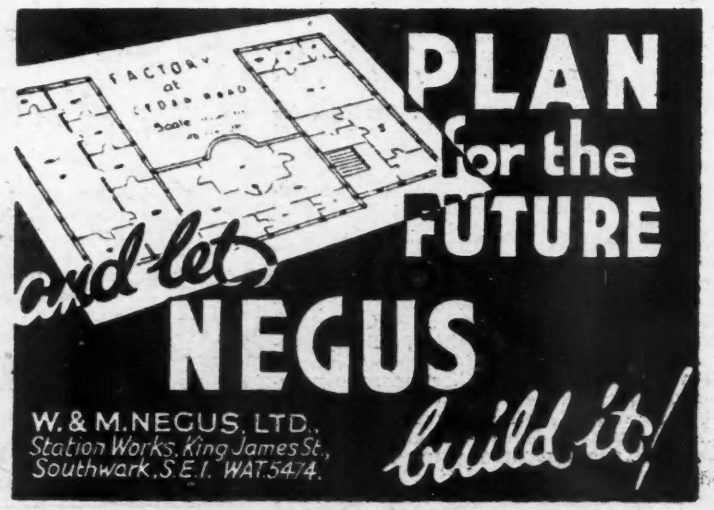
HOW TO ESTIMATE
FOR EVERY CLASS OF BUILDING WORK
By J. T. REA.

Containing 730 pages with over 600 illustrations.
Large 8vo. Cloth gilt. Price 16/- net. (By post 16/9).

The 6th edition of this unique work represents in fact, quite a new undertaking, brought up-to-date in every way, including a large amount of original memoranda, complete revision of prices, examples of analysis, and fresh details of costing, involving many thousands of figures, hundreds of calculations, and immense labour and research. Being self-contained, it avoids the weary hunt in other books for the vital, detailed knowledge which is usually hard, if not often impossible, to find.

B. T. BATSFORD, LTD.
Architectural Publishers,
15, North Audley Street, London, W.1.

Boyle's Patent "Air-Pump" Ventilator
OVER TWO MILLION IN USE.
ROBERT BOYLE & SON,
Ventilating Engineers, Emergency Address:
34, MORLAND AV., E. CROYDON, SURREY
Tel.: Addiscombe 1133.

BUY BRITISH
FLOORINGS
WOOD BLOCK PARQUET
SOLID T&G HARDWOOD
PANELLING
POINT PLEASANT LONDON S.W.18
Stevens & Adams Ltd.
PHONE PUTNEY 5611 (6 lines)

TAYLOR WOODROW CONSTRUCTION LTD.
BUILDING
AND
CIVIL ENGINEERING CONTRACTORS
London Office: 10, ST. GEORGE ST., W.
also at
SOUTHALL, MIDDX.
and Branches throughout the country
'Phone: WAXLOW 2366 (8 lines) 'Grams: "Taywood, Southall."